SayHi™

3xx Series IP Phone

User Manual

(firmware :V1.0.7.4)

320 Series

330 Series

Escene Communication Co.Ltd

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1.Getting Started

About

   3xx series is a small-screen-based IP phone in Sayhi IP phone series, it has fashion and technological appearance, excellent voice quality, and powerful features, and it is a new generation of intelligent phones to replace of the traditional desktop office terminals, It accomplished the powerful telephony features by cooperating with the communications platform,. such as the call transfer, hotline, three-party conference calling, speed dial, voice mail, Do Not Disturb, etc.

Illustrate

   NOTE: Before you use this user manual ,please check the below illustrate carefully. This user manual is common use in ES320/ES3xx/WS320/DS3X2/GS320.please check the different.
   ES330 is different from ES320 :ES330 support expansion ,but ES320 don't support it. It can up to 6 EMS32 programmable key modules
   WS320 is wifi phone ,it has wifi module, it is the different from ES320,but the function is the same . WS320 IP Phone support 2 accounts registering and 2 calls management.
   DS320 series is Dual Model IP phone , and support PSTN and VOIP , DS3X2 P IP Phone support 2 accounts registering and 2 calls management.
   GS320 has a Gbps network port. It is a supper rate phone .
   In ES Series or other same series. The difference between 320 and 330 is 330 more than 320 one account(line).

Feature Highlights:

- 128*64 Pixel LCD with Support Chinese display
- HD Voice: HD Codec
- 2 VoIP accounts
- Enterprise Phone Book
- 12 programmable hard keys and support BLF
- Support Plug and Play
- Support PoE and AC power adapter
- Support HTTP/TFTP/FTP Auto-provision/TR069 for upgrade software

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Technical Features

Item	3xx Series
Screen	Grayscale LCD with background light
	128*64 pixel, 4 display, 2.3 inch.
Line	2 (320 model); 3 (330 model)
Language	Multi-Language(e.g.CN/EN/Spain/Portugal/Poland/Turkey/French/Italy etc.)
Function Keys	4 Soft keys,2 Line keys(dual-color LED)
	6 Navigation keys(arrow button, OK button, C button)
	Volume adjust, Hands-free, Mute, Headset, Message,
	Menu, Directory, Service, Hold, Redial, Conference, Transfer
VoIP Protocol	SIP 2.0
Network Protocol	HTTP, BOOTP, FTP, TFTP, IEEE 802.1Q, *IEEE 802.1X
Codec	G.723.1(5.3Kb/s,6.4Kb/s), G.729 A/B(8Kb/s), G.711 A/U, G.722(64Kb/s)
QoS	TOS, Jiffer Buffer, VAD, CNG, G.168 (32ms)
Network	2×RJ45 10/100M Ethernet Interfaces (LAN/PC)
	IP Assignment: static IP, DHCP, PPPoE
	PC port support Bridge and Router
	DNS SRV,STUN, VPN(L2TP), VLAN/QoS
	STUN,DTMF(In-band/RFC2833/SIP INFO)
Voice	HD Voice: HD Codec/Handset/Speaker(Full-duplex)
	Handle, Headset and Hands-free mode available
	Support call centre headsets and PC headsets
	Separated 9 Level Volume Adjustment
Call Processing	Line Status Indicator Multi Account
	Always Forward, Busy Forward, No-answer Forward
	Hotline line (Immediately/Delay)
	Call Waiting, Call Queuing, Line Switching
	Call Forward, Call Transfer, Call Holding, Call Pickup, *Callback
	One Key Dial, Redial
	Phone directly speed dial, Call record direct dial
	3-way conference, SMS
	DnD, Blacklist
	Voice mail, Voice Prompt, Voice Message
	BLF, BLA, Speed dial
	P2P(Peer-to-Peer)
PBX	Call Transfer, Call Pick-Up, Network-Meeting, DND, Call Waiting, Call Hold. Call Barring, Call Back On Busy, Anonymous Call ,Intercom, Paging

Security	Login the website by password
	Login the LCD by password
	Signaling encryption(RC4)
	Media encryption(RC4)
	VPN, 802.1X, VLAN QoS(802.1pq), *LLDP
	TLS, MD5,AES, ROOT/USER Management
Application	LDAP(2): search someone in two LDAP server.
	Enterprise phone directory, download with server, and it support 800 contacts
	Public phone directory
	XML Phonebook : Search /Input/ Out put
	Private phone directory: input/output 300 contacts, every contact can save 3 numbers and the size of number is 19 byte.
	Call History(600): every records is 200 with Miss Calls /Received Calls/Dialed Calls.
	Voice Message, Voice Mail Box, Light of Message.
	Ringing Update, Input, Del,
	*we also support to order the other APP.
Power Supply	Power adapter: AC 100-240V input and DC 12V/1A output
	PoE (IEEE 802.af)
Specification	DSPG Chipset
	Storage Temperature: 0℃ ~ 60℃
	Operating Humidity: 10%~90%
	Size: 287mm*214mm*90mm
	Net weigh: 1.2kg
Certifications	CE、FCC、RoHS、Avaya、Broadsoft、Alcatel、Yeastar、Digium

Note: "*" Sign means function has not been published yet.

2.Connecting Your Phone

Your system administrator will likely connect your new 3xx Series IP Phone to the corporate IP telephony network. If that is not the case, refer to the graphic and table below to connect your phone.

1) Open the 3xx series IP Phone box; carefully check the packing list, Packing List as follows:

Item	Counts
IP Phone	1
Handset	1
Handset Cord	1
Power adapter	1
RJ45 cable	1
CD	1
Quick Installation	1
Quick User Guide	1
Product certification	1

2) As shown in figure 2.1 and figure 2.2, Please plug Handset Cord into RJ11 interface(IP Phone and Handset), RJ45 cable into the LAN interface；IP Phone will automatically start if IP Phone with POE function.

3) The phone must work together with power adapter without POE support.

4) Connect your computer to PC interface of the phone with cable.

* More detailed description please refers to the *3.Phone overview-Understanding phone buttons and hardware*.
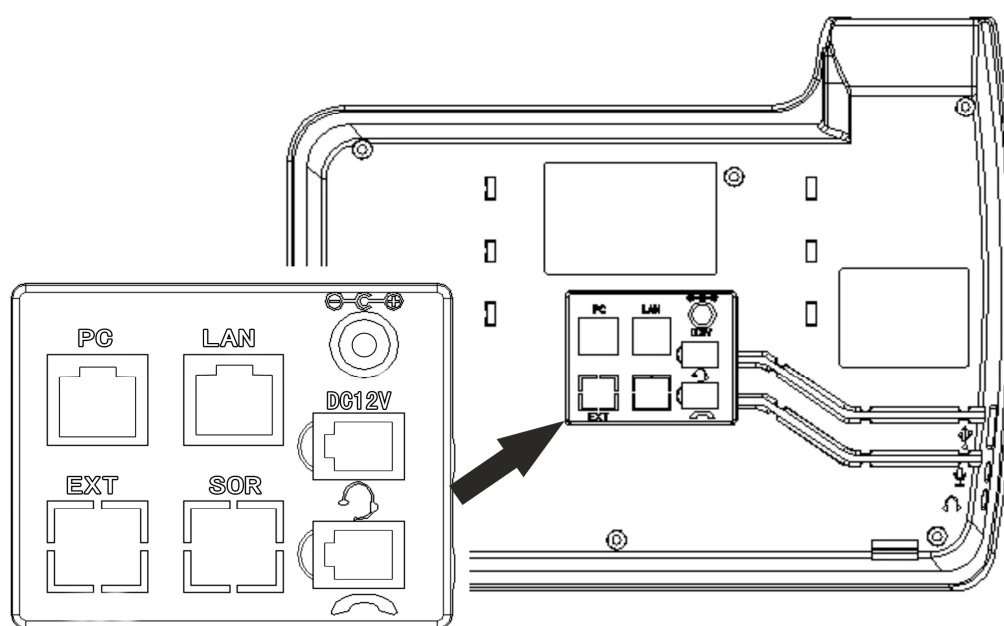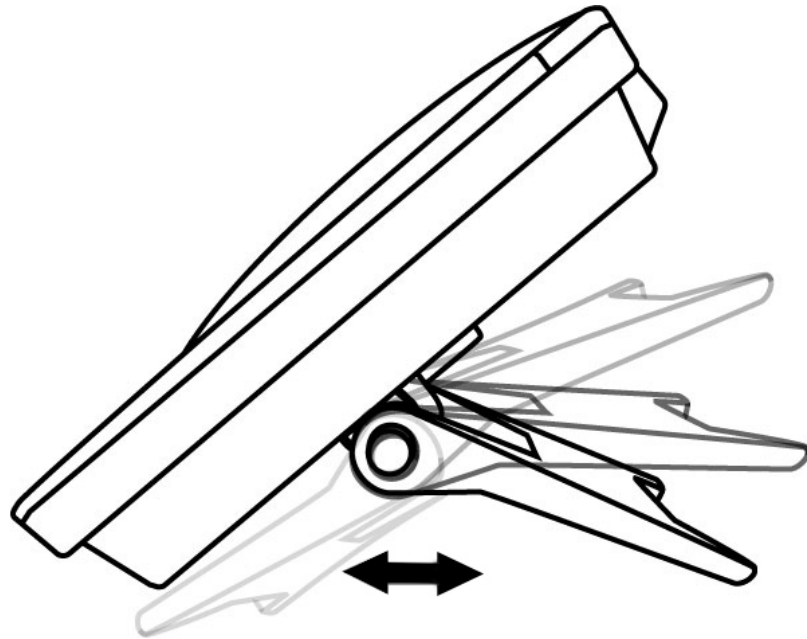
Figure 2.1 Interfaces of SayHi 3xx Series

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Figure 2.2 Foot stand of SayHi 3xx Series

3.Phone overview

Understanding Buttons and Hardware

From figure 3.1 to figure 3.2, you can understand buttons and hardware about SayHi ES320/ES330/WS320/DS3X2/GS320

Figure 3.1 Buttons and Hardware of SayHi 3xx Series(NOTE: 330 have three lines)

Num	Buttons	Description
1		Headset button: Toggles the headset on or off. Red means the feature is enabled.
2		Mute button: Toggles the Mute feature on or off. Red means the feature is enabled.
3		Messages button: Typically auto-dials your voice message service. Red means have unread voice mail.

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4	SERVICE	Server button: Open or Close the Services menu.
5	DIRECTORIES	Directory button: Use it to access call logs and corporate directories.
6	MENU	Menu button: Allows you to scroll through menus.
7		Volume button: Controls the volume and other settings.
8	CONFERENCE	Conference button: Connect calling / called party to the conference
9	REDIAL	Redial button: To Redial the last number.
10	TRANSFER	Transfer button: Transfer redirects a connected.
11	HOLD	Hold button: Put a call on hold
12	0-9, *, #	Basic Call Handling: press "#" send out a call(default)
13	Speaker button	Speaker button: Toggles the speakerphone on or off. 🔴 Red, steady: Pick up and enter normal call.
14	Softkey	Each displays a softkey function, To activate a softkey, press the softkey button.
15	Line buttons	Select the phone line（Call or Answer）； Different colors for different status: 1) 🔴 Red, flashing: There is an incoming call. 2) 🔴 Red, steady: Pick up and enter normal call. 3) 🟢 Yellow-green, flashing: Holding call. 4) 🟢 Yellow-green, steady: Active call.
16	Programmable Buttons	Hotline number can be used to bind in order to achieve speed dial； Turn on BLF: 1) 🔴 Red, steady: Remote line is busying. 2) 🟢 Yellow-green, steady: Remote line is idle. The order of the hot keys: On the left top to bottom: 1, 2, 3, 4, 5, 6； On the right top to bottom: 7, 8, 9, 10, 11, 12;

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17	C	Back button: Return to the standby interface;
18	Navigation button	"Up": Adjust ring volume, operate with the "down" button "Down": Open 'Missed Calls' list: "Left": Open "Received Calls" list; "Right": Open "Dialed Numbers" list
19	OK	OK button: To confirm the action;
20	Hands-free speakerphone	Hands-free voice of the output
21	LCD screen	`160*32 pixels, grayscale LCD with background light.`
22	Light strip	🔴 Red flashing: There are incoming call； 🔴 Red, steady: Missed Calls, or phone busy;
23	Hands-free microphone	Sounds input when hands-free

Figure 3.2 Interfaces of SayHi 3xx Series (NOTE: 330 support expansion, that it has a EXT port)

Num	Hardware	functions

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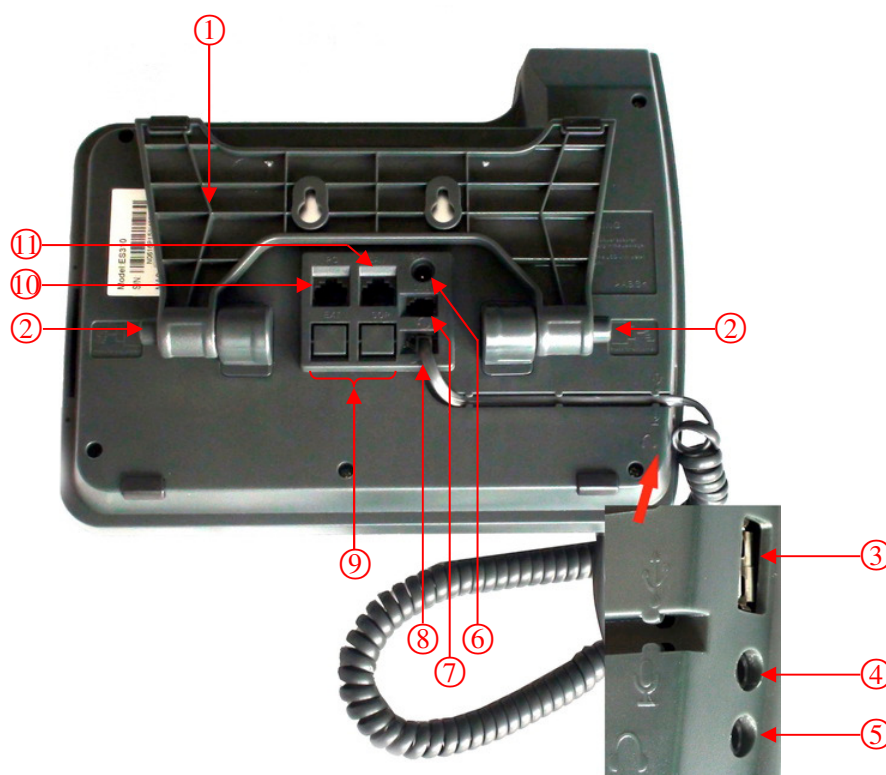
1	Footstand	Hold up phone
2	Footstand button	Press buttons at the same time to adjust the angle
3	Reserved for USB port	Enhanced scalability
4	Microphone port	Connect the Microphone
5	Headphone port	Connect the Headphone
6	Power port	12VDC
7	Headset port	Support RJ11 interface connection
8	Handset port	Connect the Handset
9	Reserved port	Enhanced scalability: 1) EXT: ESM interface； 2) SOR: S-FXS O-FXO R-record
10	LAN port	Connect to a LAN interconnecting device
11	PC port	Connect to a local PC
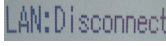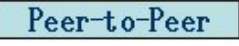
Understanding Phone Screen Features

This is what your main phone screen might look like:

Figure 3.3 LCD for example is 330 (NOTE: 320 just only have two lines).

Num	Screen	Functions

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1	Time and Date	Show current time and date.
2	Auto-answer	Enabled Auto-answer, displays "AA"
3	Missed calls	Show the number of missed calls.
4	Line status	Show the phone line status: 1) : Disconnect into network. 2) : Only Peer-to-Peer call. 3) : Network connected normal, but the line is not successfully registered. 4) : Network is OK and the line is available. 5) : Line is turned on DND.
5	Soft key labels	Each displays a soft key function (displayed on your phone screen), and the function is different when menu changes.

4.Basic Call Handling

You can perform basic call-handling tasks using a range of features and services. Feature availability can vary; see your system administrator for more information.

Note: The bold type of the following text and following a "button" in table signifies the phone's button (for example, **Speaker** button), and the coming call can use Ans(Answer) signifies soft key.

Placing a Call

Here are some easy ways to place a call on SayHi IP Phone:

If you want to...	Then...	
Place a call using the handset	Pick up the handset	--1) You can hear the dial tone;

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Place a call using a speakerphone	Press **Speaker,** or **Programmable buttons**	--2) The first line light is 🔴;
Place a call using a headset	Put on your headset and active **Headset** button, and then do as using speakerphone	--3) Enter a number; --4) Press '**#**' button（default）, -or press **Send**; -or wait 5s (default), then it send the number automatically.
Redial	--Press **REDIAL** button to dial the last number -or press **Navigation button-Right >** "Dialed number", select a number, and press **Dial**	
Dial from a call log	--1) Press **MENU** or **OK** button **>** "Call history", you can select "Missed calls", "Received calls" and "Dialed numbers", - or press **Navigation button** (in Standby interface) > select "Missed calls" (**down**), "Received calls" (**left**) and "Dialed numbers" (**right**)； --2) Then press **Dial** button**.**	
Place a call while Another call is active	--1) Press **Hold** button or soft key **Hold**; --2) Press again the line one or the other line , you can enter another number; --3) Press '**#**' button (default) ; -or press **Send** to send the number.	

Tips

• You can dial on-hook, without a dial tone (pre-dial). To pre-dial, enter a number, and then go off-hook by lifting the handset or pressing **Send**, **Headset** or **Speaker** button.

• If you make a mistake while dialing, press **C** button to erase digits.

Answering a Call

You can answer a call by simply lifting the handset, or you can use other options if they are available on SayHi IP Phone .

If you want to...	Then...	
Answer with a handset	--1) Your phone ring; --2) **Line** button of the ringing	--Pick up the handset

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Answer with the speakerphone (Non-headset mode)	line is Red⬤ and flashing, Light strip is Red▭ and flashing;	--Press **Speaker** button -or press the flashing⬤ **Line** button, -or press Ans
Answer with the a headset		--Put on headset, press **Headset** button so that the status light is Red▭, and then do as using speakerphone
Switch from a connected Call to answer a ringing call	--1) Another **Line** button is Red⬤ and flashing, Light strip is Red▭ and flashing; --2) Press the flashing⬤ **Line** button to answer (at this time, the original call will be hold.)	
Auto-answer	--1) Press **MENU** or **OK** button > "Function setting" > "Auto answer"; --2) Select "Enable"; --3) Your phone answers incoming calls automatically after a few rings.	

Ending a Call

To end a call, hang up. Here are some more details.

If you want to...	Then...
Hang up while using the Handset	--Return the handset to its cradle, -or press **End**

Hang up while using the Speakerphone	--Press **Speaker** button that is Red⬤,
	
	  -or press **Line** button for the appropriate line,
	
	  -or press **End**

Hang up while using the Headset	--Press **Handset** button, （Do not keep the headset mode）, -or press **End** (keep the headset mode)

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Hang up one call, but preserve another call on the other line	--Press **End**, -or refer to the above three methods

Using Hold and Resume (Switch Calling Line)

You can hold and resume calls. You can take a call in one line at anytime, and the other lines would be hold. As a result of that, you can switch different calling line on our phone.

If you want to...	Then...
Put a call on hold	--Press **HOLD** button, -or press soft key
Hold a line and switch to another line	Press another **Line** button for the appropriate line
Resume a call on current line	--Press **Line** button,
Release a call on different line	Select the line want to release hold, press the line, so recovery;

Tips

• Engaging the Hold feature typically generates music or a beeping tone.

• A held call is indicated by the Yellow-green and flashing Line button.

Transferring Calls

Transfer redirects a connected call. The target is the number to which you want to transfer the call.

If you want to...	Then...
Talk to the transfer recipient before transferring a call (consult transfer)	--1) Press **TRANSFER** button or press XFER; --2) Enter number; --3) press "**#**" （default）, -or press then transfer the call, -or wait five seconds(default)then transfer the call

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Transferred to idle lines or other numbers without talking to the transfer recipient (Blind transfer)	--1) Press **TRANSFER** button or XFER；
	
	--2) Press **Blind**；
	
	--3) Enter number;
	--4) Press "**#**"（default）
	  -or press **Send**, then transfer the call;
	  -or wait five seconds(default)then transfer the call

Blind transfer to the held line	--1) Press **TRANSFER** button or press XFER; --2) Press the **Line** button of held line

Using Mute

With Mute enabled, you can hear other parties on a call but they cannot hear you. You can use mute in conjunction with the handset, speakerphone, or a headset。

If you want to...	Then...
Toggle Mute on	Press **Mute** button, then the button is Red
Toggle Mute off	Press **Mute** button, then the button light off

Do Not Disturb

You can use the Do Not Disturb(DND) feature to block incoming calls on your phone with a busy tone（Can also be set to their voice mail or other extension numbers, etc.).

If you want to...	Then...
Enable global DND	--1) Press **DND**； --2) All enabled line on the phone would changes to status.
Enable DND on a single line	Press **MENU** or **OK** button > "Function setting" > "DND" > (select line) "Enable"

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Disable DND	--Global DND enabled, press **DND** to disable global DND;
	--Line DND enabled, press twice **DND** ,
	-or press **MENU** or **OK** button > "Function setting" > "DND" >(select line) "Disable"

3-way Conference

You can establish a three-party conference, during the conversation three phone parties can communicate with each other.

If you want to...	Then...
Invite the transfer recipient into a conference in a transferring	--1) When the transfer recipient answer the call, press **CONFERCENCE** button or "CONF" on your phone; --2) Then the held one, transfer recipient and you will be into a conference, and the LCD will display `conferenc 0:0:10` status.
Invite the third party into a conference in a active call	--1) Press **CONFERENCE** button or "CONF" in an active call; --2) Enter the third party number; --3) After connected the third party, press **CONFERENCE** button or "CONF" again
establish a conference with held line	--1) when one phone line is holding on and the other line is busy; --2) Press **CONFERENCE** button, -or Press "CONF" Soft key --3) press the held line's programmable button, the 3-way Conference will establish.

Expansion Installation(only 3xx-E has this item)

If you want to...	Then...

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Expansion installation	--1) Press **MENU** or **OK** button > "Function setting" > "expansion installation", --2) if you want to install expansion, please according to tips to do ,after you install ,press "finish".

Expansion Settings(only 3xx-E has this item)

If you want to...	Then...

Expansion setting	--1) Press **MENU** or **OK** button > "Function setting" > "expansion installation",
	
	   --2) choose which you want to set "expansion"
	
	   --3)choose which you want to set " programmable keys "
	
	   --4)you can set :
	
	     Mode: Speed Dial、Asterisk BLF、Speed Dial Prefix、BLA、DTMF
	
	     Account :choose account which you want to set
	
	     Name: give it a name which you want
	
	     Number: set your expansion number

Time & Date

If you want to...	Then...

Time & Date	--1) Press **MENU** or **OK** button > "Function setting" > "time & date",
	
	   --2)you can select :
	
	   SNTP: select "enable "to set parameter: time 、server 、daylight
	
	   SIP server: select "enable " to set parameter: root can modify date .
	
	   manual Settings: select "enable "to set parameter: date and time

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VOIP Call Forwarding

If you want to...	Then...
Unconditional transfer	--1) Press **MENU** or **OK** button > "Function setting" > "voip call forwarding"; --2)select "unconditional transfer", select enable. --3)input number which you want to transfer, when have a call in ,it will unconditional transfer.
Busy transfer	--1) Press **MENU** or **OK** button > "Function setting" > "voip call forwarding"; --2)select "busy transfer", select enable. --3) input number which you want to transfer, when have a call in conversation ,it will transfer.
No answer transfer	--1) Press **MENU** or **OK** button > "Function setting" > "voip call forwarding"; --2)select "no answer transfer", select enable. --3) input number which you want to transfer, when have a call in but you don't have time to answer ,it will transfer.

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5.Advanced Call Handling

Using the phone book

You can store a large number of contacts in your phone's directory. You can add, edit, delete, dial, or search for a contact in this directory. However, it only can configure the phone book on web page in 3xx Series. For details, you can refer to *7.Web Settings*.

If you want to…	Then…

Add Contacts	--1) Press Phone Book,
	
	 -or press **MENU** button > "Phone book">"Personal phone book>View All",
	
	 -or press **OK** button > "Phone book">"Personal phone book>View All";
	
	 --2) Select "Add contact", press **OK** button;
	
	 --3) Use the navigation keys to select content, press **OK** button to set and modify:
	
	    -Name: set the name of contact,
	
	    -NO.1-3: you can set up 3 contacts' numbers,
	
	    -Group: the contacts be divided into different user's groups
	
	 --4) Press **Save** soft key to complete

Add group	--1) Press DIR soft key, -or press **MENU** button > "Phone book">"Personal phone book>View All", -or press **OK** button > "Phone book">"Personal phone book>View All"; --2) Select the "add group" then press **OK** button; --3) Use the navigation keys to select content, press **OK** button to set and modify: -Group name: name of the group --4) Press **Save** soft key to complete
Modify group	--1) Press DIR soft key, -or press **MENU** button > "Phone book">"Personal phone book>View All", -or press **OK** button > "Phone book">"Personal phone book>View All"; --2) Select the "Modify group" then press **OK** button ; --3) Select the group you want to modify, press the **OK** button to set and modify, press **Save** to save the change
Delete group	--1) Press DIR soft key, -or press **MENU** button > "Phone book">"Personal phone book>View All", -or press **OK** button > "Phone book">"Personal phone book>View All"; --2) Select the "Delete group" or **OK** button； --3) Select a group you want to delete, press **OK** button

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View/Edit Contacts	--1) Press DIR soft key, -or press **MENU** button > "Phone book">"Personal phone book", -or press **OK** button > "Phone book">"Personal phone book"; --2) Select "View ALL", -or select a contact who are belong to different group; --3) Select the contact, press the **OK** button or Enter (to edit the contact's information, press **OK** button)
LDAP	--1) --1) Press DIR soft key, -or press **MENU** button > "Phone book" -or press **OK** button > "Phone book" --2)Select "LDAP", press the **OK** button. --3)Select "Search name->name", then input the name ,and press OK or Del. --4)Select "Search number->Number", then input the number ,and press OK or Del. **Pay attention: before you use LDAP function, you need to configure LDAP rule in the web configure page.**
Call from phone book	--1) Press DIR soft key, -or press **MENU** button > "Phone book">"Personal phone book", -or press **OK** button > "Phone book">"Personal phone book"; --2) Select "View ALL", -or select a contact who are belong to different group; --3) Select a contact, then press Dial, (If there are multiple numbers of one contact, press Dial to enter the interface of "call options", select the one you want to call and press Dial)

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Using Call Logs

Your phone maintains records of your missed, placed, and received calls.

If you want to…	Then…
View your call logs	--1) Press **MENU** button > "Call history" > "Missed Calls", "Received Calls", or "Dialed numbers" --2) Use the navigation keys to view the call record information.
Dial from a call log	Please refer to the previous part *4.Basic call handing – Placing a call.*

Tips: Each call log store up to 20 entries on 3xx Series IP phone.

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6.Keypad Instruction

SayHi series IP phones are can be configured in two ways. The first you can use the phone keypad where you can settings for you IP phones, the other you can log in to User Options web pages where you can settings for you IP phones.

Use phone keypad to setting. Press **MENU** or **OK** button to the main menu, Use the navigation keys to select menu, press **OK** button to confirm menu selections, press **Del** to delete input information.

SIP Account Settings

3xx series IP phone make calls based on sip accounts, 3xx series IP phones can support 2 or 3 independent SIP account, each account can be configured to different SIP server.

If you want to…	Then...
Create an SIP account	--1) Select "System setting" > "Advanced setting"; --2) Enter the password required（The default is empty）; --3) Select "SIP" > "Account sip"; --4) Select one of the account you want to setting, you can configure the following parameters -**Enable account***: Select Enable -**Display Name**: The name displayed on the screen -**User Name***: the account matched with the SIP server.（extension number）, -**Authen usr**: the Authenticated users matched with the SIP server. （The default With the same account） -**user pwd***: the user password matched with the SIP server -**Description**: description of this account, -**SIP1***: the primary SIP server, By default all calls through the server, -**SIP2**: the secondary SIP , When the primary server is unavailable ,use the SIP server -**Refresh time**: Registration refresh interval, the minimum value is 20 The default value is 3600.

	--5) Set up the above parameters, select "Submit changes" to saves settings, Complete the account creation. * **Note**: the parameters with the * mark must be set.
Disable sip account	--1) Select "System setting" > "Advanced setting"； --2) Enter the password required（The default is empty）； --3) Select "SIP" > "Account sip"； --4) Select "Enable account" > "Disable"； --5) Select "Submit changes" to saves settings

Network Setting

If you want to …	Then…

network setting	--1) Choose "System setting" > "Advanced setting"；
	
	--2) Enter the password required（The default is empty）；
	
	--3) Choose "Network", you can configure the following parameters:
	
	    -**Type**: static IP or DHCP
	
	    -**IP**: enter IP address , Note: Do not duplicate the IP address with other devices on the network
	
	    -**Mask**: enter appropriate subnet mask
	
	    -**GW**: enter appropriate gateway
	
	    - **DNS1**: enter IP address of the primary DNS server
	
	    - **DNS2**: enter IP address of the secondary DNS server
	
	    -**Web port**: the default Web port is 80,if you change it(for example change it to 88),you must use IP and Web port to login the web page (for example http://192.168.0.200:88).It will take effect on next reboot.
	
	    -**Telnet port**: the default Telnet port is 23,if you change it(for example change it to 2003),you must use IP and Telnet port to login the manage page (for example telnet 192.168.0.200:2003).It will take effect on next reboot.

Load default settings

If you want to...	Then...
Load default settings	--1) Choose "System settings" > "Advanced settings"; --2) Enter the password required（The default is empty）; --3) Choose "load default settings", and press 'OK', then go back and press "Reboot" the phone.

Customizing Rings and Volume

If you want to…	Then…
Change the ring tone	--1) Choose "System setting" > "Phone setting" > "Ring type"; --2) It will auto ringing. Press navigation to choose ring tone; --3)Press OK to set the ring tone, Press **Back** soft key to cancel

Adjust the volume level	--1) Choose "System setting" > "Phone setting" > "Volume setting";
	 --2) You can adjust the volume level of following types
	     -**Ring volume**: Phone call ring volume,
	     -**Handset volume**: Handle output volume,
	     -**Handset mic volume**: Handle input volume,
	     -**Speaker volume**: Hands-free speaker output volume,
	     -**Speaker mic volume**: Hands-free input volume,
	     -**Headset volume**: Headphone output volume,
	     -**Headset mic volume**: Headset microphone input volume

WIFI setting(only WS3xx has this item)

Tips: The WIFI ip phone support 802.11b/g/n, not support 802.11a.

If you want to…	This…

Set WIFI	--1)Choose "Menu">"System settings">"advanced settings">"advanced password (default is empty)"
	
	--2) Press navigation to choose WIFI settings；
	
	--3）Press "ok" button to change the it **Enable** or **Disable**
	
	   -Set WIFI IP: Default IP: make it default setting , **Modify IP:** change it what you want. **Mode: mode one: change the wifi IP 10.0.X.X/8 ;mode two : change the wifi IP 1.0.X.X/8 (it can prevent IP conflict)**
	
	   -Current site: the wifi which the phone use now and information
	
	   -**WPA/WPA2:** select the encryption mode(AES/TKIP)
	
	   -**Site list**: search site what you want to connect.
	
	--4）Press "site list", choose one wifi network which the phone searched
	
	 -SSID: SSID name
	
	 -BSSID: the mac address of the WIFI network
	
	 -Channel:the channel of the WIFI network use
	
	 -Type:the type of the WIFI network
	
	 -Encrypt:the encrypt of the WIFI network
	
	 -Signal:the signal of the WIFI network
	
	--5）Press "SSID", set WIFI which you choose
	
	 -Encryption: the encryption of the WIFI network
	
	 -Key type: the key type of the WIFI network
	
	 -Key: the password which you should set to allow yourself to enter the WIFI network

View status

If you want to see the phone status,Press **MENU** button > "view status" ,or press **OK** button > "view status", you can see the detail information of the phone.

| If you want to	Then......
Network	You can see the network detail information of the phone
Lines	You can see the SIP account
software	It include phone Mode、software version、kernel version、Upgrade date、Running time
Expansion	Can check the expansion, if your phone support this feature.

Diagnose

If you want to check the phone hardware function,Press **MENU** button > "diagnose" ,or press **OK** button > "diagnose", you can check the phone item as below.

If you want to	Then ....
Keys	You can check the phone keys
LCD	Press'**OK**'to start,press'**C**'to exit
Lights	Press'**OK**'to start,press'**C**'to exit
Sound	Press'**OK**'to start

7.Web Settings

We can configure IP Phone more handy through web setting. Press OK button on the keypad of the phone to enter the status page and find out the IP address of IP phone. Enter it (for example http://192.168.0.200) into the address bar of web browser. The default login name and password are both "root".

NOTE: Here use the example with 320.All of the other 3xx series ip phone was looks like as below.
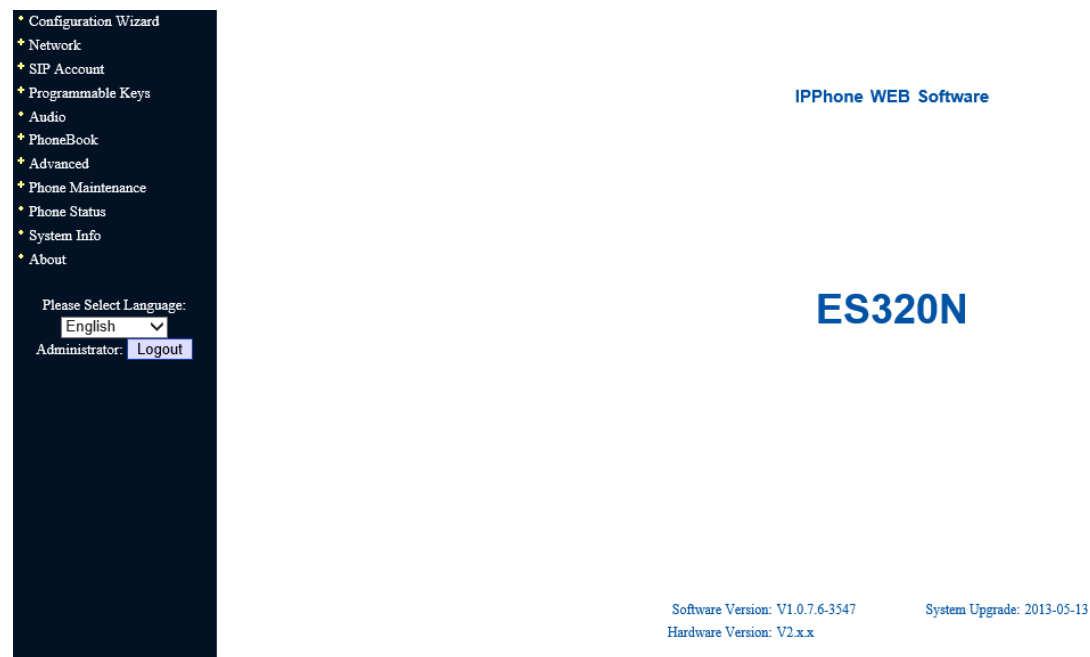
Config Guide

You can finish the base configuration step-by-step by this guide.

When press 'next', you can configure the Network parameters for the phone, You can chose other option, such as static IP or PPPoE.

Escene Communication

Network Wizard

IP settings

○ DHCP

Hostname(Option 12): [   ]

Manufacturer(Option 60): [   ]

◉ Static IP

IP Address: [192.168.0.248]

Netmask: [255.255.255.0]

Gateway: [192.168.0.1]

○ PPPoE

Username: [   ]

Password: [   ]

MTU: [1500] Default: 1500

DNS Settings

◉ Automatic

○ Manual DNS

Primary DNS: [192.168.0.1]

Secondary DNS: [0.0.0.0]

MAC Address

MAC Address: 00:26:8b:00:ee:a4

Port Management Settings

HTTP Port: [80]

Telnet Port: [23]

Socket5 Proxy Server

Socket5 Proxy Server: ◉ off ○ on

Server IP: [   ] *

Port: [1080] *

Anonymous Login: ☑

Username: [   ]

Password: [   ]

Paging Setting

Paging 1: ◉ off ○ on

Group IP: [   ] Port: [10000]

Paging 2: ◉ off ○ on

Group IP: [   ] Port: [10000]

Paging 3: ◉ off ○ on

Group IP: [   ] Port: [10000]

Paging 4: ◉ off ○ on

Group IP: [   ] Port: [10000]

Paging 5: ◉ off ○ on

Group IP: [   ] Port: [10000]

Please Note: Changing the default HTTP Port (80) will require using the new port number to access the IP phone web interface. Please note that changes require a reboot. Use the following format when not using the default HTTP (http://ip address:portnumner).

After config the network parameter, press next, then you can config sip account for the phone.

Account Settings

SIP Settings

Username: [1901] *

Password: [●●●●●●] *

SIP Server: [203.156.198.230]

Please note: More SIP configuration options can be configured using the SIP Account menu option.

[Back] [Finish]

Press Finish, the base configuration of the phone is complete, now you can use the phone to call with sip.

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WIFI Setting(only WS3xx has this item)

You can config the WIFI parameters for the phone on the web page.

WIFI Setting

You can enter the Wireless Network Name of AP.

Site Survey

Wireless Network Name(SSID): escene

SSID	BSSID	Channel	Type	Encrypt	Signal	Select

Next

If you want to search the site, you can click the   Site Survey   .

WIFI Setting

You can enter the Wireless Network Name of AP.

Site Survey

Wireless Network Name(SSID): escene

SSID	BSSID	Channel	Type	Encrypt	Signal	Select
escene	00:25:86:5c:a3:20	11 (B+G)	AP	WPA-PSK/WPA2-PSK	68	⦿
TP-LINK_47C57C	00:23:cd:47:c5:7e	6 (B+G+N)	AP	WPA-PSK/WPA2-PSK	48	○
escene02	00:19:e0:ac:50:58	1 (B+G)	AP	WPA-PSK/WPA2-PSK	38	○
TENDA	00:b0:0c:01:4a:31	6 (B+G)	AP	no	28	○
JINGTUO	f4:ec:38:38:99:22	9 (B+G+N)	AP	WPA-PSK/WPA2-PSK	28	○
xinxin	f4:ec:38:49:7e:34	8 (B+G+N)	AP	WPA2-PSK	26	○

Next

Choose anyone site and you will see,

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WIFI Status(only WS3xx has this item)

You can know what the status of the WIFI from this function.

Network

You can config the network parameters for the phone on the web page.

LAN Port

IP settings

○ DHCP

    Hostname(Option 12): [   ]
    Manufacturer(Option 60): [   ]

◉ Static IP

    IP Address: [192.168.0.248]
    Netmask: [255.255.255.0]
    Gateway: [192.168.0.1]

○ PPPoE

    Username: [   ]
    Password: [   ]
    MTU: [1500]   Default: 1500

DNS Settings

◉ Automatic

○ Manual DNS

    Primary DNS: [192.168.0.1]
    Secondary DNS: [0.0.0.0]

MAC Address

    MAC Address: 00:26:8b:00:ee:a4

Port Management Settings

    HTTP Port: [80]
    Telnet Port: [23]

Socket5 Proxy Server

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Socket5 Proxy Server: ⦿ off ○ on

Server IP: [   ] *

Port: [1080] *

Anonymous Login: ☑

Username: [   ]

Password: [   ]

Paging Setting

Paging 1: ⦿ off ○ on

Group IP: [   ] Port: [10000]

Paging 2: ⦿ off ○ on

Group IP: [   ] Port: [10000]

Paging 3: ⦿ off ○ on

Group IP: [   ] Port: [10000]

Paging 4: ⦿ off ○ on

Group IP: [   ] Port: [10000]

Paging 5: ⦿ off ○ on

Group IP: [   ] Port: [10000]

Please Note: Changing the default HTTP Port (80) will require using the new port number to access the IP phone web interface. Please note that changes require a reboot. Use the following format when not using the default HTTP (http://ip address:portnumner).

Choose network, you will find the following parameters:

Field	Description
IP Setting	
DHCP	Config the phone get ip info from DHCP server
Hostname(Option12)	Set the hostname with the option.
Hostname(Option60)	Set the hostname with the option.
Static IP	Set the IP want you want to set.
IP Address	Config the ip manual for phone
Netmask	Config the netmask manual for phone
Gateway	Config the gateway manual for phone
PPPoE	Use the PPPoE to connect the network.
Username (pppoe)	The pppoe username
Password (pppoe)	The pppoe password
MTU (pppoe)	The mtu for pppoe,default is 1500
DNS Setting	

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Automatic	Automatic to get the DNS.
Manual DNS	Setting the DNS want you want to set.
Primary DNS	The primary DNS server
Secondary	The secondary DNS server
MAC Address	
MAC Address	Display the MAC of the phone
Port Management Setting	
HTTP Port	The default web port is 80,if you change it(for example change it to88), You must use IP and Web port to login the web page(for example http://192.168.0.200:88). It will take effect on next reboot.
Telnet Port	the default Telnet port is 23,if you change it(for example change it to 2003),you must use IP and Telnet port to login the manage page (for example telnet 192.168.0.200:2003).It will take effect on next reboot.
Socket5 Proxy Server	
Socket5 Proxy Server	Enable/Disable Socket5 Proxy Server.
Server IP	Socket5 Proxy Server ip address.
Port	Socket5 Proxy Server port, default is 1080.
Anonymous Login	Enable/Disable Socket5 Proxy Server login username.
Paging Setting(NOTE: This feature priority is follow the serial number, one is highest than the others)	
Paging1	Enable/Disable Paging feature.
Group IP and Port	Group IP and Port with Paging.

PC Port

Normally choose Brigde, if you choose Router ,you need to input router IP address ,netmask.

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SIP Account

The phone attempts to register to the SIP server using the account/registrar data provided by the automatic or manual initialization

Account1

SIP Settings

Enable: ☑

Account Mode: VOIP

Display Name: 1104

Username: 1104 *

Authenticate Name: 1104

Password: ●●●●●● *

Label:

SIP Server: 192.168.0.7

Secondary server:

OutboundProxy Server:

Secondary OutboundProxy Server:

Polling Interval Time Of Registration: 32 s Default Value: 32s，Range: 20s~~60s

NAT Traversal: Disable

STUN Server:

BLA: ⦿ off ◯ on

BLA Number:

Call Method: ⦿ SIP ◯ TEL

Subscribe Period: 1800 Default: 1800s, Min: 120s

Register Expire Time: 3600 Default: 3600s, Min: 40s

DNS-SRV: ⦿ off ◯ on

SIP Transport: ⦿ UDP ◯ TCP ◯ TLS

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Choose one Account, you will find the following parameters:

Field	Description
SIP Setting	
Enable	You can choose on/off to enable/disable the line.
Account Mode	You can choose VOIP/PSTN, but this model un-support PSTN, If you want to, Pls contact us or buy another model.
Display Name	It is showed as Caller ID when making a phone call
Username	It is a username provide by SIP Server
Authenticate Name	It is authenticated ID for authentication
Password	It is a password provide by SIP Server
Label	Label with this account.
SIP Server	Server for registration, provided by administrator
Secondary server	When the main server can't work, it also can register in this secondary server.
Outbound Proxy Server	Put into the address with the outbound proxy server.
Secondary Outbound Proxy Server	When the main out bound server can't work, it also can use this secondary server.
Poling Interval Time Of Registration	Poling Interval Time Of Registration, default is 32 s.
NAT Traversal	Defines the STUN server will be active or not

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STUN Server	Session traversal utilities for NAT.
BLA	Share with the line.
BLA Number	BLA Number
Call Method	This method include SIP and TEL.
Subscribe Period	Subscribe expire time.
Register Expire Time	IP phone automatically registered every time
DNS-SRV	Enable/Disable DNS-SRV.
SIP Transport	There are UDP/TCP/TLS three options
Call	
Amount Of Line Account Used	The line key of account used, default is 2
Do Not Disturb	Enable/Disable Do Not Disturb
Anonymous Call Rejection	Enable/Disable anonymous call.
Use Session Timer	Enable/Disable refresh session function. The device will send an Invite packet to refresh the session during a call if it enable.
Session Timer	The refresh session time interval.
Allow-events	Enable/Disable Allow-events.
Registered NAT	Enable/Disable Registered to NAT
Ring Type	Set ringing type for current account.
UDP Keep-alive Message	The phone periodically sends a UDP packet to keep the port active and to avoid the server to shut down the port
UDP Keep-alive Interval	Default is 30 second.
Security	
SIP Encryption	Enable/Disable SIP encryption.
RTP Encryption	Enable/Disable RTP encryption.
Encryption Algorithm	The encryption algorithm at this time we only have RC4.
Encryption Key	The key with encryption.
RTP Port Range	The port range with RTP.

Programmable Keys

Line Keys: If you do not need more of the lines to use. you can change it to other features, like Speed Dial/ Speed Dial Prefix/ DTMF/ BLF/ BLA/ Paging/ Call Park/ Intercom.

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line keys

	Mode	Account	Name	Number
Key1:	Line	Account1		
Key2:	Line	Account1		

Line
Speed Dial
Speed Dial Prefix
DTMF
BLF
Paging
Call Park
Intercom
BLA

Submit

Function Keys: If you do not like the default setting with the function keys feature. You can change it options to what you like or normal use.
NOTE: IF THE PHONE WITHOUT THE KEY, YOU DO NOT NEED TO SET THE KEY.

Function Keys (Note:if the phone without the key,you don't need to set the key)

	Operation	Account	Name	Number
Up:	Redial	Account1		
Down:	Default	Account1		
Left:	DND	Account1		
Right:	Contacts	Account1		
OK:	Enterprise Phonebook	Account1		
Conference:	LDAP	Account1		
Redial:	Dir	Account1		
Transfer:	Speed Dial	Account1		
Hold:	Call List	Account1		
Service:	Missed Calls	Account1		
Diretories:	Dialed Calls	Account1		
Menu:	Menu	Account1		
Mute:	SMS	Account1		
Message:	Call Forward	Account1		

Submit

Soft Keys: Soft keys is the key with below display in the LCD. You can change it for your mind to the other features in many all kinds of status.

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Expansion Module

Expansion module is extended Hotline function; you can believe it support more hotline by using Expansion module. You can refer to *2.Connecting Your Phone* about connecting of Expansion module.

After connecting Expansion module to a phone, you can install it as follow:

1)After installing, you can set parameters of each Extension as follow(only 330 support)

Expansion module	
Key n	Each Expansion module supports 32 keys.

Mode	Five modes:
	  --Speed Dial: Enable speed dialing in this key;
	  --Asterisk BLF: Enable BLF in this key;
	  --Speed Dial Prefix
	  --DTMF
	  --Asterisk BLA

Account	A SIP account relates to this key, another word, you will call this hotline by this SIP account.
Name	Description of this hotline.

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Number	Number relates to this key.

*Regarding the settings of Expansion module, please confirm the model of your phone is DS330_E/DS330_PE.

Audio

The IP phone supports the following voice codes: G.722, G.711A, G.711U, G.723, and G.729A.

You can enable/disable the desired codes via Web interface. Please contact your system administrator for more details about the codes.

To enable/disable the codes:

1)   Choose Audio-> Audio Codes

2) Use the navigation keys to highlight the desired one in the Enabled/Disable Codes list, and press

the >> / << to move to the other list.

3) Choose Submit to save the change.

Of course, you can control the voice bulk in this choose.

Phone Book

Group

You can add, edit and delete group in a phone book on web page of 3xx series.

1) Click "Phone Book" > "Group",

If you want to add a Group, you just ought to click 'Add Group' .

You can edit an existed Group by click .

You can delete an existed Group by click , if you want to delete all Groups, you just ought to click 'Delete All Group'.

2) When you add a group or edit an existed group, you can set several parameters as follow:

Group	
ID	Serial number of a group
Description	Description of a group
Group Name	Name of a group

Contact

You can add, edit and delete contact in a phone book on web page of 3xx series.

The phonebook can storage 300 contact entry.

1) Click "PhoneBook" > "Contact",

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If you want to add a Group, you just ought to click 'Add Contact'.

You can edit an existed Contact by click ✎ .

You can delete an existed Contact by click 🗑 , if you want to delete all Contacts, you just ought to click 'Delete All Contact'.

2) When you add a Contact or edit an existed Contact, you can set several parameters as follow:

Contact	
Serial Number	Serial number of a contact
First Name	The First Name of a contact
Last Name	The Last Name of a contact
Mobile Number	The Number1 phone number of a contact
Office Number	The Number2 phone number of a contact
Other Number	The Number3 phone number of a contact
Group	You can assign a contact to a specific group. If there isn't any group set on the phone, the group is None by default.
Account	Select a SIP account relating this contact, that is you can dial to the contact from this SIP account.

LDAP

1).Overview

LDAP stands for Lightweight Directory Access Protocol which is a client-server protocol for accessing a directory service. LDAP lets you locate organizations, individuals, and other resources such as files and devices in a network, whether on the Internet or on a corporate intranet, and whether or not you know the domain name, IP address, or geographic whereabouts.

An LDAP directory can be distributed among many servers on a network, then replicated and synchronized regularly.

2).Configuration

Please note that LDAP Phonebook support on the version must be V1.0.5.6 and higher, then access to the web "Phone Book>LDAP page, you can find the configured option is like following picture. the detail configure in the appendix.

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BanList

You can add, edit and delete banlist in a phone book on web page of 3xx series.

1) Click "PhoneBook" > "BanList",

If you want to add a BanList, you just ought to click 'Add BanList'.

You can edit an existed BanList by click ✎ .

You can delete an existed BanList by click 🗑, if you want to delete all BanLists, you just ought

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to click 'Delete All BanList'.

2) When you add a BanList or edit an existed BanList, you can set several parameters as follow:

BanList	
Serial Number	Serial number of a BanList
Description	Description of a BanList
First Name	The First Name of a ban contact
Last Name	The Last Name of a ban contact
Mobile Number	The number1 phone number of a ban contact
Home Number	The number2 phone number of a ban contact
Office Number	The number3 phone number of a ban contact
Account	Select a SIP account relating this ban contact, that is the ban contact can't dial to this SIP account.

Enterprise Phonebook

You can download Enterprise Phonebook from this web interface. But you should do second develop on the sip server to enable this function completely.

If the sip server no add some function to hold this option ,this option can be userd.

Advance

Phone Setting

You can use phone setting to set the time, qos, port Mirroring for the phone.

Phone Setting

Basic

Called No AnswerTime: ☑ 70 s (Min:20, Max:99)

DTMF: ⦿ RFC 2833 ◯ Inband ◯ SIP Info ◯ Auto

Pound Send Mothod: ⦿ # ◯ %23

RFC 2833 PayLoad: 101

BackLight: ◯ off ◯ Always On ⦿ timer 60 s (Min:1, Max:255)

Keyboard Lock: Disabled ▾

PSTN Setting

PSTN Ring Type: ◯ PSTN Ring ⦿ VOIP Ring

PSTN Prefix Code:

VOIP Prefix Code:

Hook: ◯ off ⦿ on

Hook Frequency: 500 (Default:500 min:100 max:1600)

Qos

SIP Qos: 26 (0-63)

Voice Qos: 46 (0-63)

Call

Hot Line Function: ⦿ off ◯ Immediately Hot Line ◯ Delay

Hot Number:

Call Waiting: ◯ off ⦿ on

Call Waiting Tone: ⦿ off ◯ Play on currently active device Freqency: 10 s (5-60)

Auto Answer: ⦿ off ◯ on ◯ Turn On But Filter This Group: NONE ▾

Auto Answer Mode: ⦿ Hands Free ◯ Handle ◯ Headset

Pickup Function: ◯ off ⦿ on

Pickup Code: 123

Message: *97

Fuzzy Search: ⦿ off ◯ on

Booking Voicemail: No ▾

Play Voicemail Tone: ⦿ off ◯ on

Miss Call Display: ◯ off ⦿ on

Call List Save: ◯ off ⦿ on

DND Softkey: ◯ off ⦿ on

Play Hangup Tone: ◯ off ⦿ on

Transfer Code : ⦿ off ◯ on Number:

Conference Exit Result: ⦿ Disconnect All ◯ Others Remain Connected

Return code when refuse: 603(Decline) ▾

Return code when DND: 603(Decline) ▾

Flash hook time(<800ms): 500

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3xx series IP Phone

When used Phone Setting option, you can set several parameters as follow:

Phone Setting	
Basic	
Called No Answer Time	When it has coming call and enable this feature, the caller will be request time out in the stipulated time.
DTMF	The DTMF transmitted mode, include RFC2833,Inband,SIP Info, Auto
Pound Send Method	When you to use the code looks like #28#123 or %23123, you need to setting this feature.
RFC 2833 Pay Load	Default is 101, RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals
Back Light	The backlight of the phone LCD

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Key Board Lock	Lock with the phone LCD, when you enable the right password, it will auto disable this feature. if you want to use again, you need to open it again in the web management. Tips: the password is the same with the phone LCD. Default is empty. The Menu key can open it. [Menu Key]: only lock the Menu function, others can normal work. [Function Keys]: include Menu/Redial/Transfer/Hold etc. you just can use the number keys and speaker key. [All keys]: as the name implies. [Lock & Answer]: Auto open Auto-answer and lock the keys,
PSTN Setting [If your phone does not support PSTN feature, you can ignore this option]	
PSTN Ring Type	You can set the ringing type use PSTN or VOIP.
PSTN Prefix Code	Input the prefix code with PSTN
VOIP Prefix Code	Input the prefix code with VOIP
Hook Frequency	Setting the frequency with hook.
QoS	
Sip QoS	The range is 0~63,default is 26
Voice QoS	The range is 0~63,default is 46
Call	
Hot Line Function	It include Immediately Hot Line and Delay Hot Line
Hot Number	Input the number what you want to.
Call Waiting	When someone is coming a call after the call is talking, the second call will be in the queue.
Call Waiting Tone	Select the frequency with the tone call waiting.
Auto Answer	Auto-answer the coming call, it also can set with group.
Auto Answer Mode	Include Hands Free / Handle / Headset.
Pickup Function	Someone can pickup you call when you talking with some body.
Pickup Code	The code with someone want to pickup your call.
Message	The code with voice message.
Fuzzy Search	Fuzzy search someone with the phone book in the idle.
Booking Voice Mail	Open this feature, the phone light(Message) will be bright when it get message.
Play Voice Mail Tone	Open this feature, it will be ringing when it get message.
Miss Call Display	Turn on or off the display with Miss call in the phone LCD.
Call List Save	Save the call list into the phone.
DND Soft key	Display or not in the LCD.
Play Hang up Tone	The tone with hang up in busy.
Transfer Code	The code with transfer.
Conference Exit Result	Conference originator hang up the phone, hang up two ways of it.
Return Code When Refuse	Select the code you want to with the server.
Return Code When DND	Select the code you want to with the server.

Flash hook time	The time with the flash hook.
VOIP Call Forward	
All ways	All ways transfer the call to others.
If busy	If the phone was busy working, the call will be transfer to others.
If No Answer	If the phone was no answer, the call will be transfer to others.
Ring Frequency	The ring frequency with the VOIP Call Forward.
Set Time Mode	
Set Time Mode	The mode of set time for phone,include SNTP/SIP Server/PSTN/Manual
SNTP Server	You can select in the list or input owner server address.
Update Interval	The update interval with SNTP.
Daylight Saving Time Mode	Enable/disable the DST for the phone
Time Format	You can use 24 hour time format or 12 hour time format
Date Format	Normal format with date you can select in the list.
Time Zone-GMT	You can select different time zone for the phone
Manual Setting	
Manual Setting	This used to manual set time for the phone
Other	
QoS	The QoS priority, support diff-server and precedence
Check When Upgrade Software	Checking the upgrade software with MD5.
BLF Light	The light switch with BLF.
Headset Mode	Select headset mode with normal or seat.
Ring Type On Seat Mode	Select ring type mode with headset or speaker.
Network Packet Mirroring	When select on, then you can capture the phone's packet use notebook which connect to pc port of the phone

VLAN Setting

You can add the phone and PC to different VLAN used VLAN Setting option.

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When used VLAN Setting option,you can set several parameters as follow:

VLAN Setting	
Enable VLAN	You can enable/disable vlan for phone and pc
VID [LAN/PC Port]	The vlan you want the phone or pc to join

VPN Setting

I f you need to setup a VPN Setting, you should fill below options.

When used VPN Setting option, you can set several parameters as follow:

VLAN Setting	
Enable VPN	You can enable/disable VPN for phone and pc
VPN Type:	There is one choose you can choice.
VPN Server Addr	VPN server's ip
VPN User Name	VPN user's name
VPN Password	A password be used for authentication

Dial Plan

If you want to setup a dial plan, you can click "Dial Plan".

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Click "add rule" to entry this interface.

Dial Plan Setting	
ID	Dial Plan ID
IP	The ip of a phone which you want to call
prefix	The number which you need to press actually if you want to call the phone
Called Insert Number	There have two option, Enable or Disable.
Position	Which position you want insert the number
Number	Waht number you want to insert
Called Delete Number	There have two option, Enable or Disable.

(Note: When you want to add code and delete at the same time, you can add code first, after that base on the number you add, decide the position and length of the delete code.)

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IP Strategy

You can use IP Strategy feature to make a list which line you want to allow make a call for your. e.g. As following picture you can see it has 192.168.0.248 in the list. When you open this feature. It means you just allow come from this IP address meeting

Global SIP

You also can setup the SIP server on Global SIP.

Password Phone Maintenance

Log

If you need to catch a debugging Level, you need setup on this interface. The capture packet just can save 1000 information.

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You can change the password used to login phone GUI in Password option.

In Password option, you can set several parameters as follow:

Password	
Username	The login username of the web page
Old Password	The old password used to login of the web page
New Password	The new password used to login of the web page
Confirm Password	The new password used to login of the web page
Administrator	Login phone web page used administrator privileged
User	Login phone web page used general user privileged

Default Setting

You can load the phone to the factory default setting in default setting option.

```
Default Setting

Then click this button this equipment will restore to the
default status

Pay Attention: It will take effect on next reboot.

                     Reset to Factory Setting
```
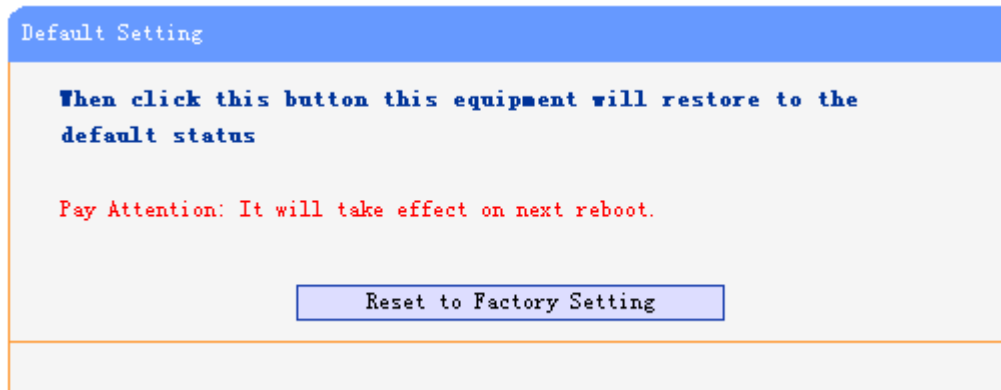
Press the 'Reset to Factory Setting' option, the phone will load to factory default setting on next reboot.

Auto Provision

when you open the auto provision function the phone will auto provision if the phone detect a higher software or kernel which are put on the software server .the detail information about auto provision you can see the appendix.

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When use auto provision, you can set several parameters as follow:

Auto Provision	
Auto Provision	You can enable/disable auto provision by select on/off
Protocol	The protocol use for auto provision, it include tftp/http/ftp
Software Server URL	The server address of the auto provision
Username	The username provide by provision server
Password	The password provide by provision server
Auto Download Software	This used to auto download software from server
Auto Download Kernel	This used to auto download kernel from server
Auto Download Config File	This used to auto download config file from server
Broadsoft Compatibility	This used to compatible the broadsoft format's config file

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Auto Download Expansion	Expansion must the phone support this feature. You can make sure or not the phone model is it support with "P", eg. ES330N-E
Auto Download Enterprise Phonebook	This used to auto download Enterprise Phonebook from server
Auto Download Personal Phonebook	This used to auto download personal phonebook from server
Booting Checked	This used to checked the auto provision when phone booting
Disable the phone while booting checking	Off or On
Auto Provision Frequency	This used to set the time interval for auto provision
Auto Provision Time	This used to the specific time for auto provision
Auto Provision Next Time	Reset the Auto Provision Next Upgrading time.
AES Enable	You can enable/disable AES encrypt for auto provision
AES Key	The key of the AES
Auto Provision Now	This used to do auto provision immediately

FTP Upgrade

You can upgrade the software, kernel and configure file for the phone use ftp.

When use ftp upgrade, you can set several parameters as follow:

FTP Upgrade	
Server IP	The ip address of the ftp server

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Filename	The name of the file want to download from ftp server
Username	The username provide by ftp server
Password	The password provide by ftp server
Software Upgrade	Used to upgrade the software of the phone
Kernel Upgrade	Used to upgrade the kernel of the phone
Configuration	You can used update/backup to update/backup the configure file of the phone
Phone Book	You can used update/backup to update/backup the phonebook of the phone
EXT Module	You can used update/backup to update/backup the expansion of the phone

TFTP Upgrade

You can upgrade the software, kernel and configure file for the phone use tftp.

When use tftp upgrade, you can set several parameters as follow:

TFTP Upgrade	
Server IP	The ip address of the tftp server
Filename	The name of the file want to download from ftp server
Software Upgrade	Used to upgrade the software of the phone
Kernel Upgrade	Used to upgrade the kernel of the phone
Configuration	You can used update/backup to update/backup the configure file of the phone
Phone Book	You can used update/backup to update/backup the phonebook of the phone

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| EXT Module | You can used update/backup to update/backup the expansion of the phone |

HTTP Upgrade

You can upgrade the software, kernel and configure file for the phone use http.

When use http upgrade, you can set several parameters as follow:

| HTTP Upgrade	
Select a File	Browse the software/kernel/config file you want to upgrade from http
Software Upgrade	Used to upgrade the software of the phone
Kernel Upgrade	Used to upgrade the kernel of the phone
Configuration	You can used upload/download to upload/download the configure file of the phone
Phone Book	You can used upload/download to upload/download the phonebook of the phone
EXT Module	You can used update/backup to update/backup the expansion of the phone

Reboot

You can use reboot option to reboot the phone.

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When you press 'Reboot', the phone will reboot.

Phone Status

You can see the currently status of the phone when use Phone Status option.

System info

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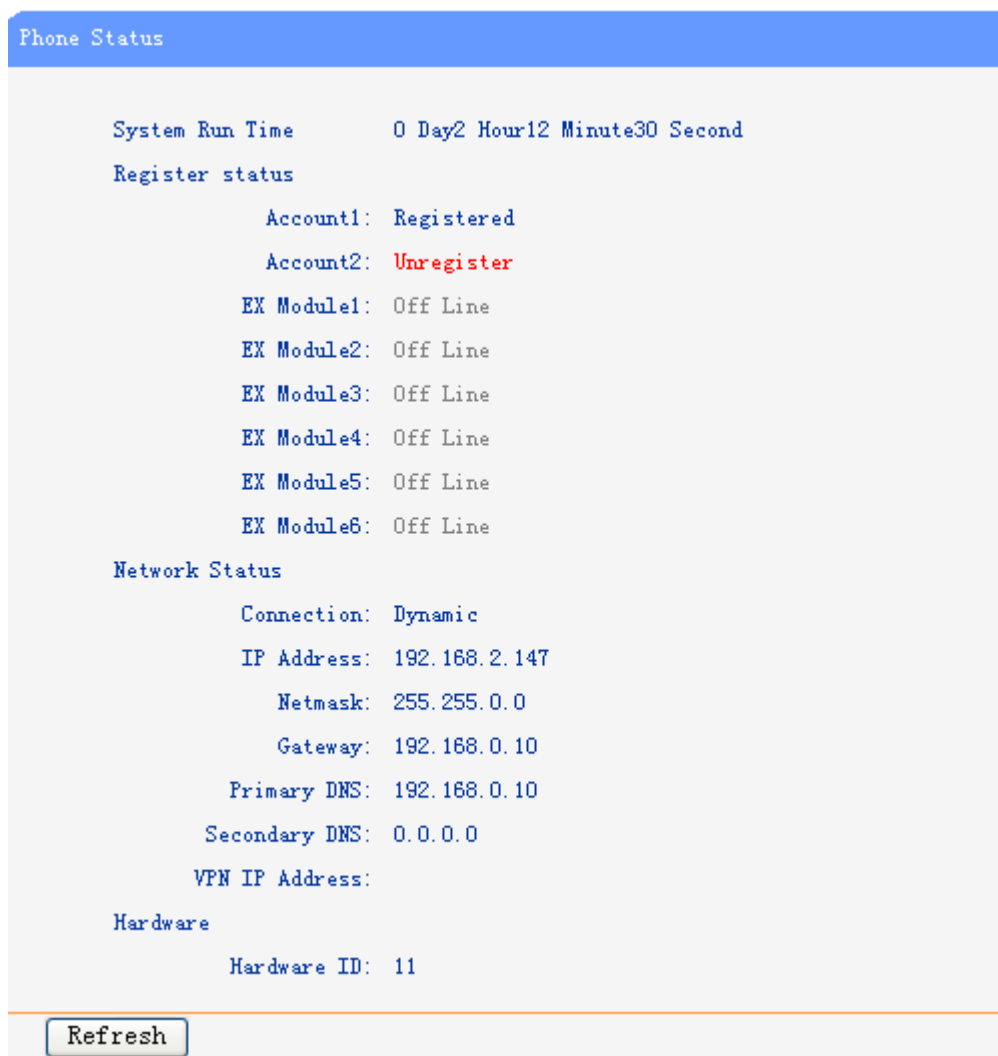
System Info

Phone Model: ES320N
Software Version: V1.0.7.6-3547
Hardware Version: V2.x.x
Kernel Version: V2.6.5
AutoProvision Server URL: TFTP://192.168.0.20
TFTP Server IP: TFTP://192.168.0.20

Refresh

About

You can see the phone model when used About option.

Configuration Wizard
Network
SIP Account
Programmable Keys
Audio
PhoneBook
Advanced
Phone Maintenance
Phone Status
System Info
About

Please Select Language:
English
Administrator: Logout

IPPhone WEB Software

ES320N

Software Version: V1.0.7.6-3547   System Upgrade: 2013-05-13
Hardware Version: V2.x.x

Attention:

On this interface ,you can see the software and kernel which we used for test and this user_manual is written base on this software and kernel.

This software version is V1.0.7.6-3547

This kernel version is v2.6.5

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Appendix：

Auto Provision

1.Bulid TFTP/HTTP/HTTPS/FTP Server

1.1   The Auto Provision Working principle

1. Bulid the FTP/HTTP/HTTPS/FTP Server
2. Place the Auto Provision related file(configure file/software/kernel) in server
3. The phone according to the the server URL and download the file to update the phone data or upgrade software/kernel
4. You can do 3 way to start Auto Provision:
   * Booting Checked: Auto Provision when the phone booting after reboot.
   * Auto Provision Now manually.
   * timing Auto Provision

1.2   Bulid TFTP/HTTP/HTTPS/FTP Server

The auto provision Server don't distinguish the model of server,it only need the server can support TFTP/HTTP/HTTPS/FTP protocol.
If you already build TFTP/HTTP/HTTPS/FTP Server,so you only need place some related auto provision file in server and config the parameters in auto provision web page.
If you don't have TFTP/HTTP/HTTPS/FTP Server,we can suggest you to download the server in Internet by yourself.
Tftp server:cisco tftp or tftpdwin
Ftp server: Serv-U Server
Http server:hfs server
If you finished build your TFTP/HTTP/HTTPS/FTP Server,you can follow do this:place some related auto provision file in server and config the parameters in auto provision web page.

2. Place the configure file/software/kernel in Server

When the software or kernel auto-provision is enabled and want to run, IP Phone will check the software and kernel version at first, so we need make some pre-configuration on the provisioning server.

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2.1   Auto Provision for Software

3) Create a notepad file named"**F000XXX.cfg**" or "**FD000XXX.cfg**" (the "XXX" is
   decided by the model of the IP phone you are using, for example, if the model is
   ES620, the file name is "F000600.cfg",the "FD" is decided by the model of the
   IP phone with 'N', for example,ES320N);
   Named rule of the file:

       F000600.cfg: for ES620, ES610 and DS622;

       F000400.cfg: for ES410 and DS412;

       F000300.cfg: for ES310 and DS312;

       F000200.cfg: for ES210 and DS212.

       F000320.cfg: for ES320

       F000330.cfg: for ES330

       F000118.cfg: for HS118

       F000108.cfg: for HS108.

       F0WS620.cfg: for WS620

       F0WS320.cfg: for WS320

       FD000600.cfg: for ES620N

       FD000400.cfg: for ES410N

       FD000330.cfg: for ES330N

       FD000320.cfg: for ES320N

       FD000220.cfg: for ES220N

       FD000110.cfg: for IP115

       FD000120.cfg: for IP125

       FD000100.cfg: for US101N and US102N and US103N

       FD000108.cfg: for HS108PZ

       FD0WS320.cfg: for WS320N

       FD0WS220.cfg: for WS220N

       FD0WS100.cfg: for WS102N

4) Open the notepad file "F000XXX.cfg" or "FD000XXX.cfg" and write the new
   software name in it, the software file name format must like this:S(2)_Phone
   Model_version+Version Number. the "S2_" decided by the model of the IP
   phone with 'N',for example,
   ES620:   the software name is like "S_ES620_version2.2.7.5-3077"
   ES320N: the software name is like "S2_ES320N_version1.1.5.0-1147"
   Other Model and so on.
   Write down the new version you want to upgrade and save it on your
   provisioning server.
     Please note that if the version is not older than (and same as) the one on your phone,
   auto-provision of your software would be not available.

5) After it, upload the new software to the TFTP/HTTP/HTTPS/FTP provisioning

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server and complete the pre-configuration steps.

2.2   Auto Provision for Kernel

1. Create a notepad file named"**K000XXX.cfg**" or "**KD000XXX.cfg**"(the "XXX" is decided by the model of the IP phone you are using, for example, if the model is ES620, the file name is "K000600.cfg", the "KD" is decided by the model of the IP phone with 'N', for example,ES320N);
    Named rule of the file:
        K000600.cfg: for ES620, ES610 and DS622 and WS620;
        K000400.cfg: for ES410 and DS412;
        K000300.cfg: for ES310 and DS312 and ES320 and HS118 and WS320;
        K000200.cfg: for ES210 and DS212 and HS108;
        K000330.cfg: for ES330;
        K000100.cfg: for US101 and US102 and US103.
        KD000320.cfg: for ES320N and WS320N
        KD000330.cfg: for ES330N
        KD000220.cfg: for ES220N and WS220N
        KD000100.cfg: for US101N and US102N and US103N and WS102N
        KD000108.cfg: for HS108PZ
        KD000110.cfg: for IP115
        KD000120.cfg: for IP125
        KD000400.cfg: for ES410N
        KD000600.cfg: for ES620N

2. Open the notepad file "K000X00.cfg" or "KD000XXX.cfg" and write the new kernel name in it, for example,
        K_uImage_200_version2.2.9.bin: for ES210 and DS212 andHS108;
        K_uImage_300_version2.2.9.bin: for ES310 and DS312 and ES320 and HS118 and WS320 and ES320 and ES330;
        K_uImage_400_version2.2.9.bin: or ES410 and DS412;
        K_uImage_600_version2.2.9.bin: for ES620, ES610 and DS622 and WS620;
        K2_uImage_100N_version2.6.3.bin: all the model of the IP phone with 'N', ES320N and ES220N and ES330N and so on
Write the new version you want to upgrade and save it on your provisioning server.
    Please note that if the version is not older than (and same as) the one on your phone, auto-provision of your kernel would be not available.

3. After it, upload the new kernel to the TFTP/HTTP/HTTPS/FTP provisioning server and complete the pre-configuration steps.

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2.3   Auto Provision for Configure file

1.   Name of configuration file:
The configuration file on the provisioning server is named as the MAC address of IP phone itself. Escene's IP phones support two different configuration files for auto-provision:
1.   Normal Configuration file:
Normal Configuration file is the configuration file of your Escene IP phone. You can download it from your phone (You can see the following chapter to see how to download a configuration file from Escene IP hone) and modify by yourself.

● If the phone model with 'N',for example ES320N,please see this:
   The Normal Configuration file can separate two part:
      ● Global parameters configuration file：for example Audio Codecs、Volume、Server URL and so on,make these global parameters to a file,and can use by different model(model name come form web or LCD menu),the filename format must be sys_model.xml
      ES320N: sys_ES320N.xml
      ES220N: sys_ES220N.xml

sys_ES320N.xml

Reference XML documents：

      ● Private parameters configuration file：for example Account configuration that different phone,the filename format must be MAC.xml,for example **00112233445.xml**。

00112233445.xml

Reference XML documents：

● If the phone model don't with 'N', or example ES620,please see this:
If the IP phone's MAC address is 00:11:22:33:44:55, the normal configuration file of it should be ***001122334455.xml***.

00112233445.xml

Reference XML documents :

2.   Broadsoft Configuration files:
Broadsoft Configuration files support the format of Broadsoft IP-PBX. However, you can use them for provisioning. There are two files should be set on your provisioning server, they are also named by the MAC address of your phone
   1.   ***001122334455.cfg***: a configuration file for system settings, for example, network, audio and so on.
   2.   ***001122334455.txt***: a configuration file for SIP accounts.

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3.How to create the Configuration file

2. Download a configuration file from your phone:

You can download a configuration file from your phone by HTTP as follow:

1. Open the web page of your IP phone, click "Phone Maintenance">"HTTP Upgrade";

2. Then click "Download" of Configuration:
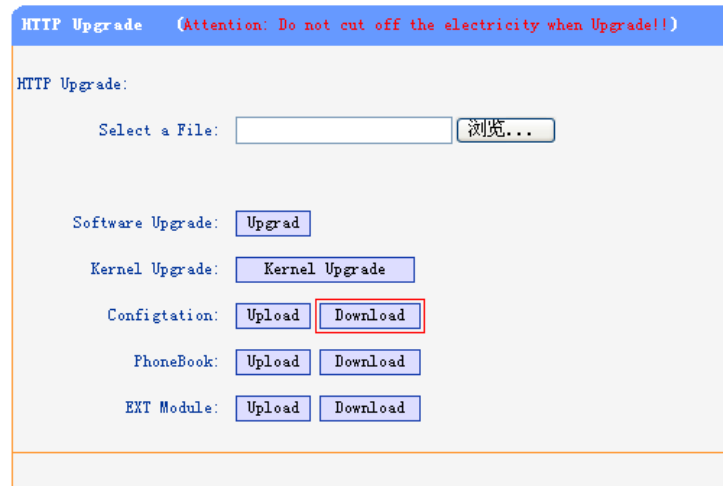
3. If you want to use this file to auto-provision, you just need to modify it by yourself and rename it to the MAC address of your IP Phone with .xml suffix.

3. create the Configuration file Manually

If you want to create the Configuration file Manually,you must read this *reference documents about the* Configuration file format detail and you may know the what mean parameters of the Configuration file:

Configuration
file format detai

2.4 Auto Provision for Expansion

The Extern.xml includes the settings of programmable buttons on the phone and all Expansion Modules. All the phones can download the settings from a same file and they will have the same settings (for example, Speed-dial, BLF and so on).

   You can't rename the file on the provisioning server. The file name is fixed to Account1_Extern.xml.(Account1 is the first account you register)

1001_Extern.xml

Reference XML documents :

2.5 Auto Provision for Enterprise Phonebook

Escene IP phone supports Enterprise Phonebook and Personal Phonebook.They use same XML format,you can see the reference documents.

4. Enterprise Phonebook:
Enterprise Phonebook is used for all staffs in your office. All phones will download a common phonebook for all staffs. The file's name must be
Enterprise_Phonebook.xml on your provisioning server and you can not rename it.

Reference XML documents: Enterprise_Phonebook.xml

2.6 Auto Provision for Personal Phonebook

5. Personal Phonebook:
Personal Phonebook is individual for each IP phone. The file on your provisioning server is named by the first account of your IP phone. If the IP phone's first account is 1287, the Personal Phonebook of this phone is ***1287_Phonebook.xml***.

Reference XML documents: 1001_Phonebook.xml

3.Configure parameters in Auto Provision Web page

3.1 Auto Provision TFTP using DHCP Option 66

The following steps will descript auto-provision by TFTP. You also can use HTTP and FTP for auto-provision with our phones.if you don't use option 66,you can jump to 3.2 section.

DHCP Server: (Microsoft Windows 2003 server)
1. Start up the "DHCP Management Console";
2. Expand the DHCP scope which will contain the phones
3. Right-click on the "Scope Options" node
4. Select "Configure Options"
5. In the "General" tab, scroll down the list of options and identify the option labeled "066 Boot Server Host Name"
6. Enable the "066 Boot Server Host Name" and enter the string value according to

3xx series IP Phone

the examples discussed previously

> string value:
> 192.168.0.201(TFTP Server IP Address);

7. Click the "OK" button

3.2   Configure parameters in Auto Provision Web page

● **Login in IP Phone web:**
1. Input the IP Phone's IP Address in browser;
2. Enter user and password with "root" then open the web page;
3. Click "Phone Maintenance" and select "Auto Provision";
4. select like as follows:

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It supports three protocols in Auto-Provision:TFTP,HTTP and FTP.
The format with provisioning server URL is:
TFTP:
TFTP://192.168.0.201(192.168.0.201 is the default Server IP address)
HTTP:
HTTP://192.168.0.201
HTTPS:
HTTPS://192.168.0.201
FTP:
FTP://192.168.0.201

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Notice:You only need input the URL path,don't need input the filename.
For example:

You place the 001122334455.xml in tftp://192.168.0.201/abc/,you only need input tftp://192.168.0.201/abc,please don't input tftp://192.168.0.201/abc/ 001122334455.xml.

Username: the user to login FTP/HTTP/HTTPS server
Password: the password of the user using to login FTP/HTTP/HTTPS server
✲_Username and password are available in FTP/HTTP/HTTPS only (unavailable in TFTP)._

- **Auto Download Software:**
Download software from server and upgrade it automatically.
- **Auto Download Kernel:**
Download kernel from server and upgrade it automatically.
- **Auto Download Config File:**
Download configuration file from server and update it automatically.
- **BroadsoftCompatibility:**
If you select this function, you need to put two configuration files (with Broadsoft format) on the provisioning server. Otherwise, you can download the configuration file from your phone via HTTP (regarding the steps, you can refer to _"Download a configuration file from your phone"_ in this document.), modify it and upload it to the server for auto-provision.
- **Auto Download Expansion:**
Download configuration file of the Programmable buttons on your phone or Expansion Modules automatically.
- **Auto Download Enterprise Phonebook:**
Download Enterprise Phonebook from server and update it automatically.
- **Auto Download Personal Phonebook:**
Download Personal Phonebook from server and update it automatically.
- **Booting Checked:**
Check all items you had selected and upgrade/update them when the phone boot
- **Auto Provision Frequency:**
The auto provision Frequency which you want.
- **Auto Provision Time:**
The time you want to execute auto-provision.

- **Timing Auto Provision**
Examples of Auto Provision Frequency and Time:
  - When you set the Auto Provision Frequency and disableAuto Provision Time (set to None), the Auto Provision function will work after the AutoProvision Frequency;
  - When you set both Auto Provision Frequency and Auto Provision Time, for example:

You set the AutoProvision Frequency to 24 hours, and the Auto Provision Time to 2:00 at 8:00 today (1, Jan), it will pass 24 hours at first and work at the nearest 2:00, it means that the Auto Provision function will work at 2:00 on the day after tomorrow (3, Jan).

Therefore, if you want this function work at 23:00 tonight and it is 8:00 now, you need to set the Auto Provision Frequency to 0 hours and the Auto Provision Time to 23:00.

- If you finished the config Auto Provision Frequency and Auto Provision Time,you can click the button of "**Reset Timing**" and timing is finished.
- **Auto Provision Next Time** show what next time start Auto Provision.
- The 3 and 4 ponit only support in the phone model with 'N',for example ES320N.

- **AES Encryption:**

AES encryption is used for all the setting files of your phone (include configuration file, Expansion file, Enterprise/Personal Phonebook etc. You just need to enable the AES Encryption function and input the AES Key matching the one on your server on.

Auto-provision AES feature use I

Reference AES Encryption documents:

1. Overview

LDAP stands for Lightweight Directory Access Protocol which is a client-server protocol for accessing a directory service. LDAP lets you locate organizations, individuals, and other resources such as files and devices in a network, whether on the Internet or on a corporate intranet, and whether or not you know the domain name, IP address, or geographic whereabouts.

An LDAP directory can be distributed among many servers on a network, then replicated and synchronized regularly.

2. Configuration

Please note that LDAP Phonebook support on SayHi Series IP Phone, the version must be V1.0.5.6 and higher, then access to the web UI₵ PhoneBook₵ LDAP page, you can find the configured option is like following picture.

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We introduce each parameter attributes in following section.

3. Attributes

3.1 Common Attributes

Abbrevation	Name	Description
cn	commonName	Full name of the user.
company	company	Company or organization name
gn	givenName	Firstname also called Christian name
homePhone	homeTelephoneNumber	Home Phone number
mobile	mobileTelephoneNumber	Mobile or cellular phone number
o	organizationName	Organization name or even organizational name

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ou	organizationalUnitName	Usually department or any sub entity of larger entity
pager	pagerTelephoneNumber	Pager telephone number
sn	surname	Surname,last name or family name
-	telephoneNumber	Office phone number

3.2 Attributes on Escene Configured Page

3.2.1 LDAP Name Filter

Description: LDAP name filter is the search criteria for name look ups. The format of the search filter is compliant to

the standard string representations of LDAP search filters (RFC 2254). The name prefix for search entered by the user

is represented by the "%" symbol in the filter.

Valid Values: Standard LDAP filters e.g. (&(sn=%)(telephoneNumber=%s))

Default Value: <blank>

Examples:

  ℂ (&(telephoneNumber=%s)(sn=%))

Returns all LDAP records which have the "telephoneNumber" field set and the "sn" field starts with the entered prefix.

  ℂ (|(cn=%s)(sn=%s))

Returns all LDAP records which have the "cn" or "sn" field starting with the entered prefix.

  ℂ (!(cn=%s))

Returns all LDAP records which "do not" have the "cn" field starting with the entered prefix.

3.2.2   LDAP Number Filter

Description: LDAP number filter is the search criteria for number look ups. The format of the search filter is compliant to the standard string representations of LDAP search filters (RFC 2254). The number prefix for search entered by the user is represented by the "%" symbol in the filter.

Valid Values: Standard LDAP filters e.g.

(|(telephoneNumber=%s)(Mobile=%s)(ipPhone=%s))

Default Value: <blank>

Examples:

  ℂ (|(telephoneNumber=%s)(Mobile=%s)(ipPhone=%s))

Returns all LDAP records which have the "telephoneNumber" or "Mobile" or "ipPhone"field starting with the entered prefix.

₡ (&(telephoneNumber=%s)(sn=*))

Returns all LDAP records which have the "sn" field set and the "telephoneNumber" field starts with the entered prefix.

3.2.3 Server Address

Description: This setting refers to the DNS name or IP address of the LDAP server.

Default Value: 0.0.0.0

Example:

₡ 192.168.1.100

₡ ldap.company.com

3.2.4 Port

Description: This setting specifies the LDAP server port.

Default Value: 389

3.2.5 Base

Description: This setting specifies the LDAP search base (the distinguished name of the search base object) which corresponds to the location in the directory from which the LDAP search is requested to begin. The search base narrows the search scope and decreases directory lookup time. If you have multiple organizational units in your directory (for example, OU=Sales in O=COMPANY and OU=Development in O=COMPANY), but the "OU=Sales" organization never uses AOL AIM, you can restrict the lookup to the OU=Development subtree only by entering providing the following search base: OU=Development, O=COMPANY. Other examples see below.

Default Value: <blank>

Examples:

₡ o=UNIVERSITY OF NEW ORLEANS,c=US

₡ o=SFU,c=CA

₡ dc=escene,dc=cn

3.2.6 User Name

Description: This setting specifies the bind "Username" for LDAP servers. Most LDAP servers allow anonymous binds in which case the setting can be left blank. However if the LDAP server does not allow anonymous binds, you will need to provide the Username and Password allowed to query the LDAP server.

Default Value: <blank>

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3.2.7 Password

Description: This setting specifies the bind "Password" for LDAP servers. Escene phones use "simple" authentication scheme for bind requests. This setting can be left blank in case the server allows anonymous binds. Otherwise you will need to provide the Password along with the Username in order to access the LDAP server.
 Default Value: <blank>

3.2.8 Max.Hits(1~32000)

Description: This setting specifies the maximum number of search results to be returned by the LDAP server. If Max.hits is 0 or blank the LDAP server will return all search results. Please note that a very large value of the "Max. Hits" will slow down the LDAP lookup, therefore the setting should be configured according to the available bandwidth. The default value for this setting is blank.
Default Value: 50

3.2.9 LDAP Name Attributes

Description: This setting can be used to specify the "name" attributes of each record which are to be returned in the LDAP search results. This setting compresses the search results, as the server only returns the attributes which are requested by the Escene phone. The setting allows the user to configure multiple space separated name attributes. Please consult your system administrator regarding which name attributes are to be configured.
Valid Values: Space separated name attributes, see examples below.
Default Value: <blank>
Examples:
- cn sn displayName

   Requires "cn", "sn" and "displayName" fields for each LDAP record.
- givenName

 Requires "givenName" field for each LDAP record.
- vorName nachName

 Requires "vorName" and "nachName" fields for each LDAP record.

3.2.10 LDAP Number Attributes

Description: This setting can be used to specify the "number" attributes of each

record which are to be returned in the LDAP search results by the LDAP server. This setting compresses the search results, as the server only returns the attributes which are requested. The user can configure multiple space separated number attributes by using this setting. Please consult you system administrator regarding which number attributes are to be configured.

Valid Values: space separated number attributes e.g. telephoneNumber Mobile ipPhone Home

Default Value: <blank>

Examples:

℃ Mobile telephoneNumber ipPhone

 Requires "Mobile", "telephoneNumber" and "ipPhone" fields for each LDAP record.

℃ Home Private Office

Requires "Home", "Private" and "Office" fields for each LDAP record.

3.2.11 Protocol

Description: Protocol is the protocol version for the phone when send the bind request to the server. Please make sure your LDAP server support version 3/2 bind request.

Valid Values: version 3/version 2

Default Value: version 3

3.2.12 Search Delay(ms)(0~2000)

Description: This setting is for configuring the delay display time after search.

Valid Values: 0~2000

Default Value: 0

3.2.13 LDAP Lookup for Incoming Call

Description: This setting can be used to enable calling line identification using LDAP. When the setting is turned

"Enable", the phone performs an LDAP number search for the incoming number and

displays the name of the calling party accordingly.

Valid Values: <Enabled>, <Disabled>

Default Value: Disabled

3.2.14 LDAP Sorting Results

Description: This setting is for sorting the search results, if make this option "Enabled", it will arrange in the   first alphabetical of the name order if return the name display; if only has the number return, it will list in numerical order. Valid Values: <Enabled>,

<Disabled>

Default Value: Disabled

3.2.15   LDAP Lookup for PreDial/Dial

Description: This setting can be used to enable call out line identification using   LDAP. When the setting is turned

"Enabled", the phone performs an LDAP number search for PreDial or Dial status.

Valid Values: <Enabled>, <Disabled>

Default Value: Disabled

3.3   Example for Configuration

You can use the below settings as a starting point and adjust the filter and display attributes according to your needs.

LDAP Name Filter: (&(telephoneNumber=%s)(sn=%))

LDAP Number Filter: (&(telephoneNumber=%s)(sn=*))

Server Address: 192.168.200.254   #####this setting is relate with the server configuration.

Port: 389   #####this setting is relate with the server configuration.

Base: dc=Escene,dc=cn   #####this setting is relate with the server configuration.

User Name: cn=manager,dc=escene,dc=cn   #####this setting is relate with the server

                                                                                    configuration.

Password: *****   #####this setting is relate with the server configuration.

Max.Hits: 50

LDAP Name Attributes: cn sn displayName

LDAP Number Attributes: Mobile telephoneNumber ipPhone

Protocol: Version 3   #####this setting is relate with the server configuration.

Search Delay(ms)(0~2000): 0

LDAP Lookup for Incoming Call: Enabled

LDAP Sorting Results: Enabled

LDAP Lookup for PreDial/Dial: Enabled

4. Configuration on Escene Phone

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5. LDAP Server Installation

5.1 Install OpenLDAP Server on Windows 2003 System

Install "openldap-2.2.29-db-4.3.29-openssl-0.9.8a-win32_Setup.exe" according to default prompt,please remember the install path for next steps.

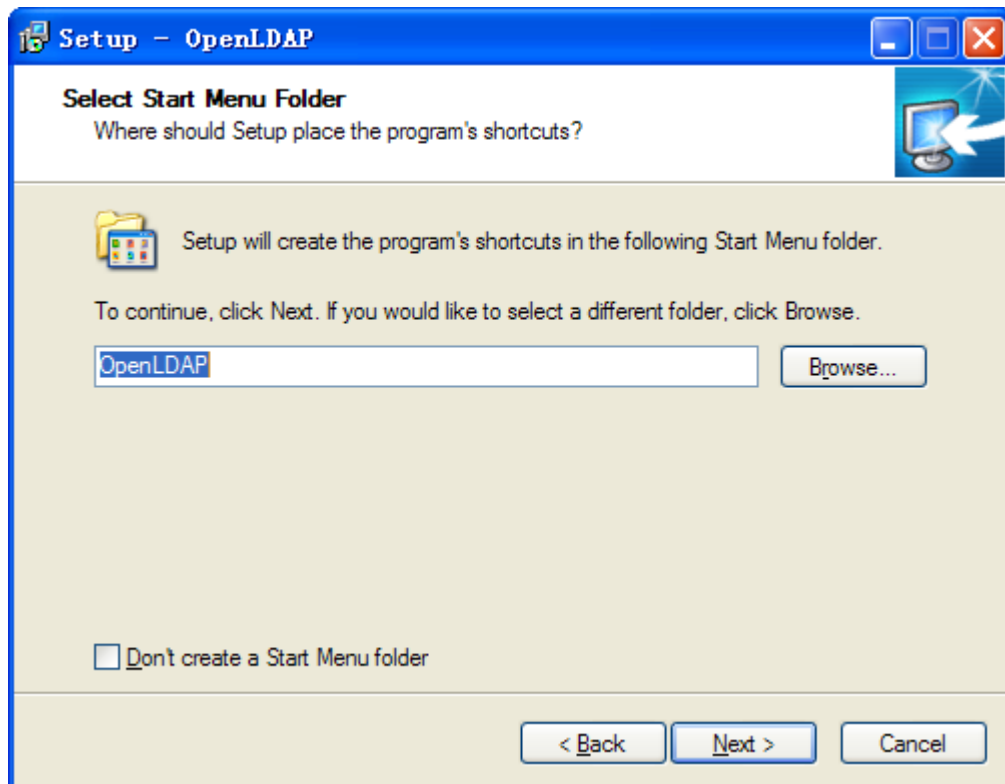1. Double click the install program to run the installation.

www.escene.cn/en/ 79
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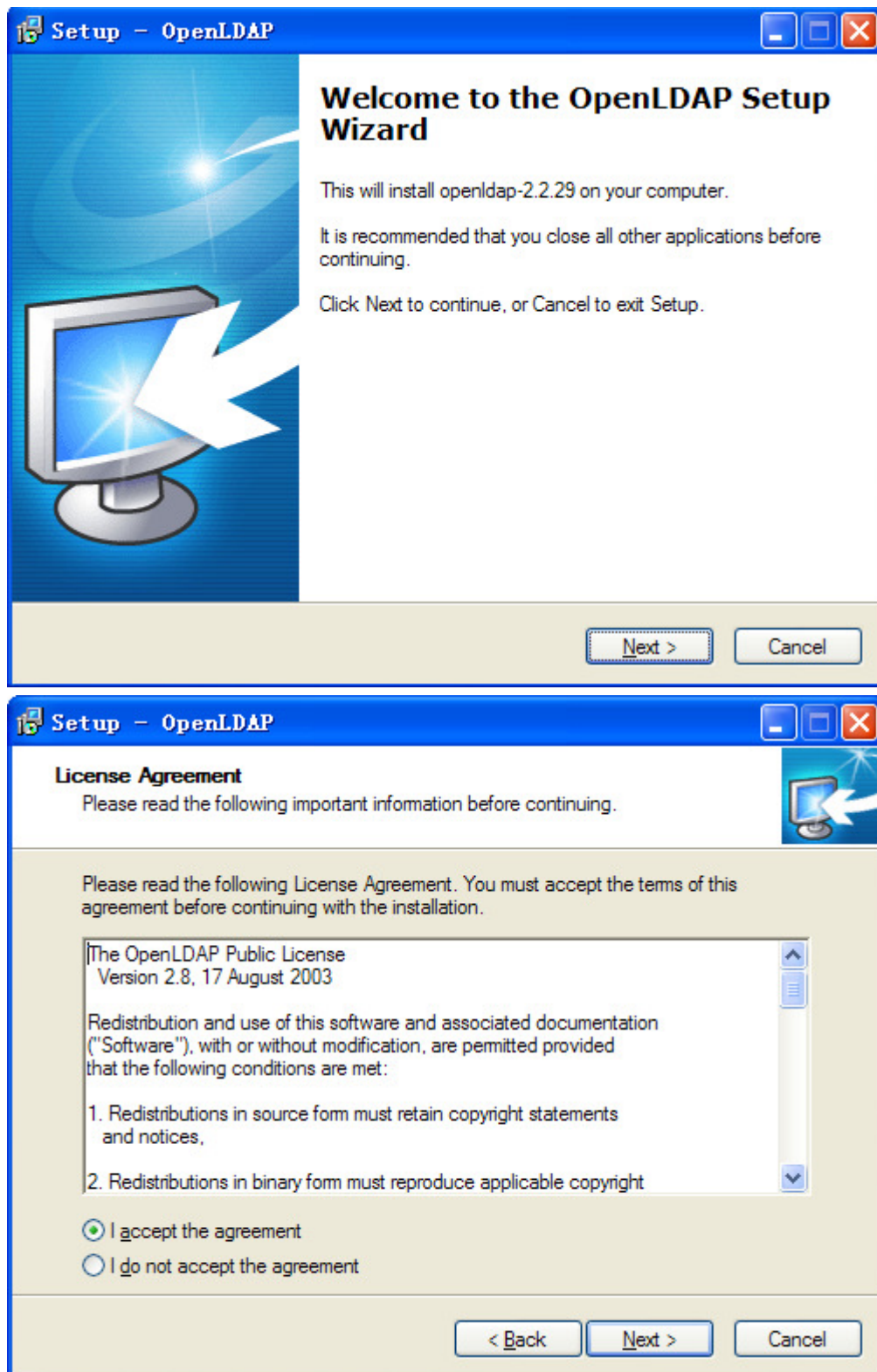
2. Please remember the install path. E.g. C:\Program Files\OpenLDAP.
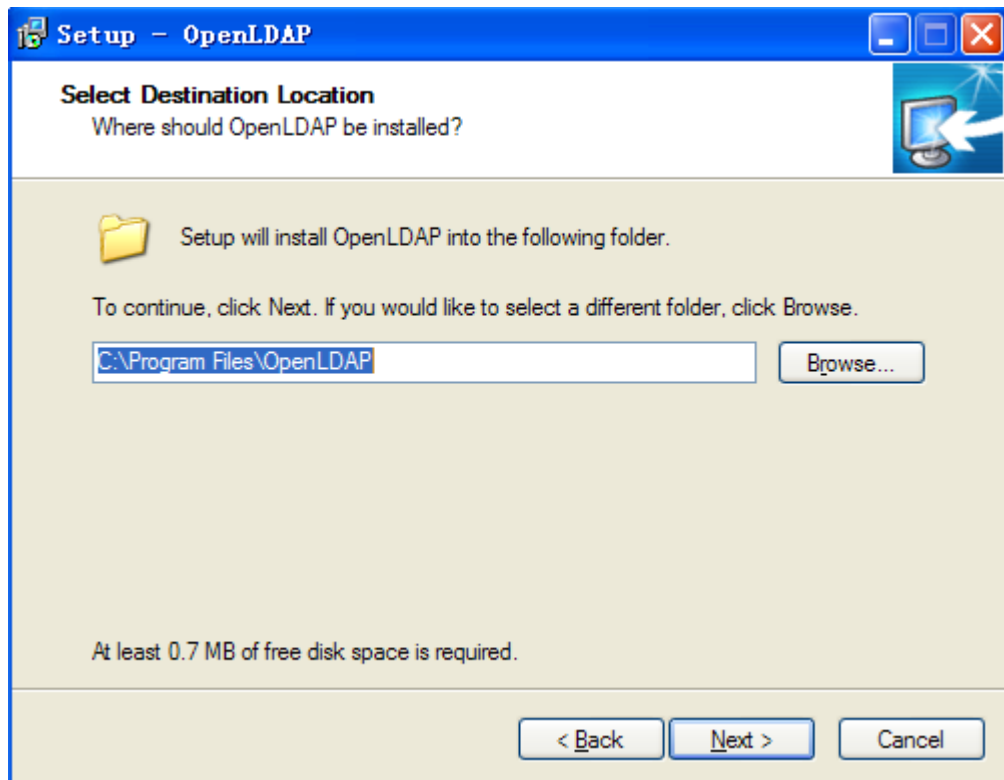
3. Choose the [Full installation] mode as picture.

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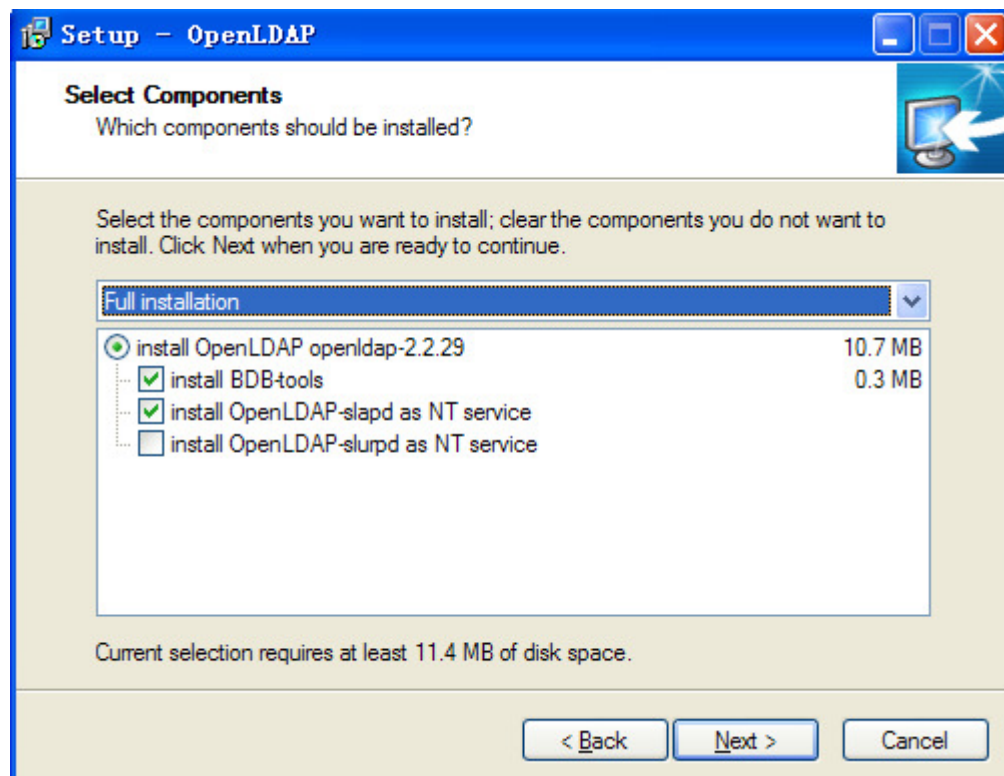
5.2 Configure OpenLDAP Server

5.2.1 Configure slapd.conf file
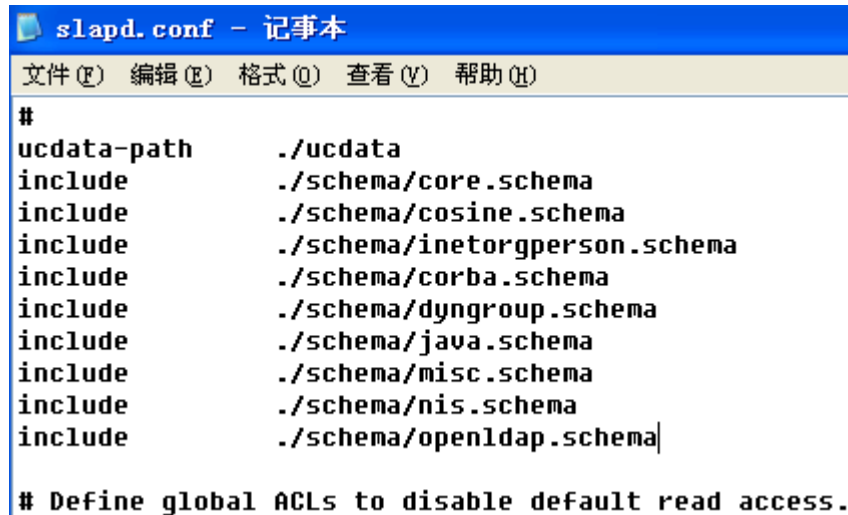
1. Add "schema" in slapd.conf file

Access to the install path (for example,C:\Program Files\OpenLDAP),open the file names slapd.conf,find the command

include   ./schema/core.schema

Add the other commands like:

include   ./schema/cosine.schema
include   ./schema/inetorgperson.schema
include   ./schema/corba.schema
include   ./schema/dyngroup.schema
include   ./schema/java.schema
include   ./schema/misc.schema
include   ./schema/nis.schema
include   ./schema/openldap.schema

2. Modify the LDAP directory node

Access to the install path,open the file names slapd.conf,find the command

suffix   "dc=my-domain,dc=com"
rootdn   "cn=Manager,dc=my-domain,dc=com"

Please modify these two commands to following commands (please do not have any space during the quotation marks ""):

suffix   "dc=escene,dc=cn"
rootdn   "cn=Manager,dc=escene,dc=cn"

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```
##############################################################
# BDB database definitions
##############################################################

database        bdb
suffix          "dc=escene,dc=cn"
rootdn          "cn=Manager,dc=escene,dc=cn"
# Cleartext passwords, especially for the rootdn, should
```

3.Modify the LDAP password

Access to the install path,open the file names slapd.conf,find the command

    rootpw   secret

Please modify it to the password you want to set.

    rootpw   escene

5.2.2 Run slapd server

Cmd to OpenLDAP's install path,for example,"cd c:\Program Files\OpenLDAP" , then run the command "slapd –d 1"

```
C:\WINDOWS\system32\cmd.exe

Microsoft Windows XP [版本 5.1.2600]
(C) 版权所有 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>cd c:\Program Files\OpenLDAP

C:\Program Files\OpenLDAP>slapd –d 1
```

If run the server successfully,you can find the command of "slapd starting"

```
slapd startup: initiated.
backend_startup: starting "dc=escene,dc=cn"
bdb_db_open: dbenv_open(./data)
slapd starting
```

NOTE:

Please do not close this window to make sure the LDAP Server keep running.

5.2.3 Add contact

Create a plain text named "escene.ldif" in install path.
Then put the content like following:

```
dn:                dc=escene,dc=cn
objectClass:       dcObject
objectClass:       organization
dc:                escene
```
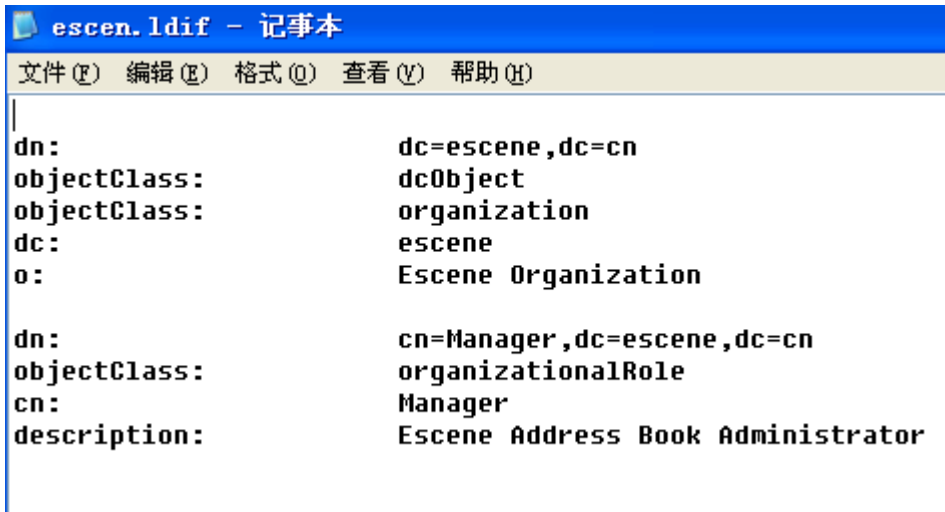
o: Escene Organization

dn: cn=Manager,dc=escene,dc=cn
objectClass: organizationalRole
cn: Manager
description: Escene Address Book Administrator

Cmd to execute command "ldapadd -xv –D "cn=Manager,dc=escene,dc=cn" –W –f escene.ldif".

Input the password you set,here is escene.

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6. Install LDAP Client tool in Windows System

6.1 Install LDAPExploreTool2
   Install the LDAPExploreTool2 according to the prompt.

6.2 Create the Configurations in LDAPExploreTool2
   6. Run the LDAPExploreTool2,access to File→Configurations.
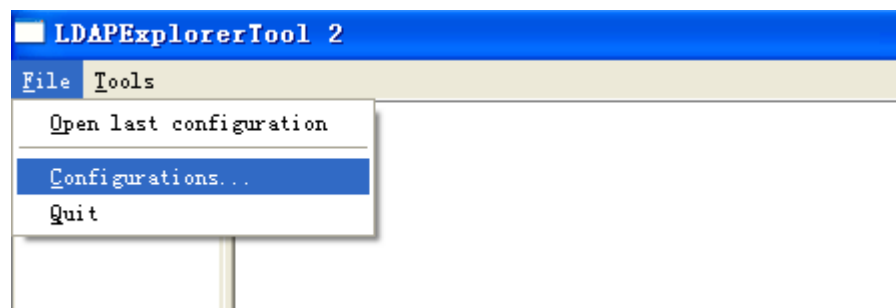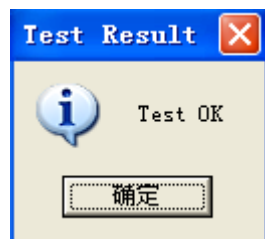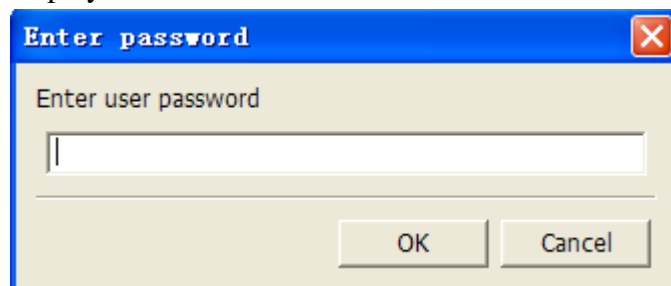

   7. Create the New Configuration
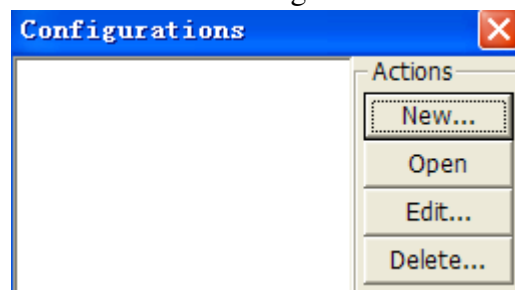
      a. Fill in a name in Configuration option

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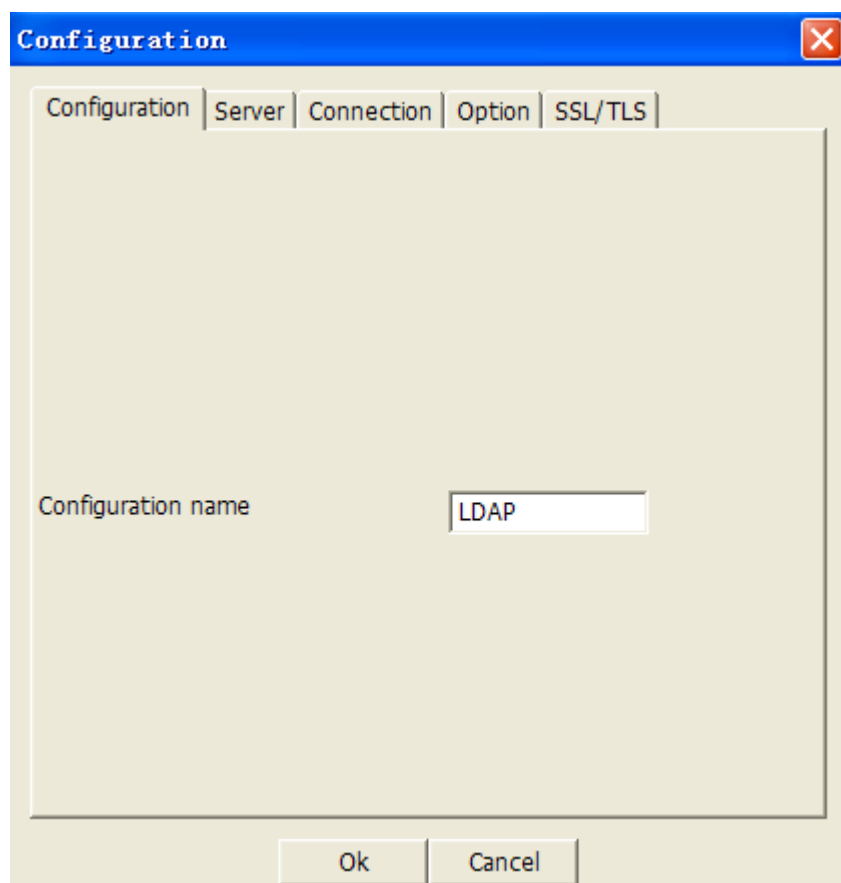
b. Input the server address on Server option.

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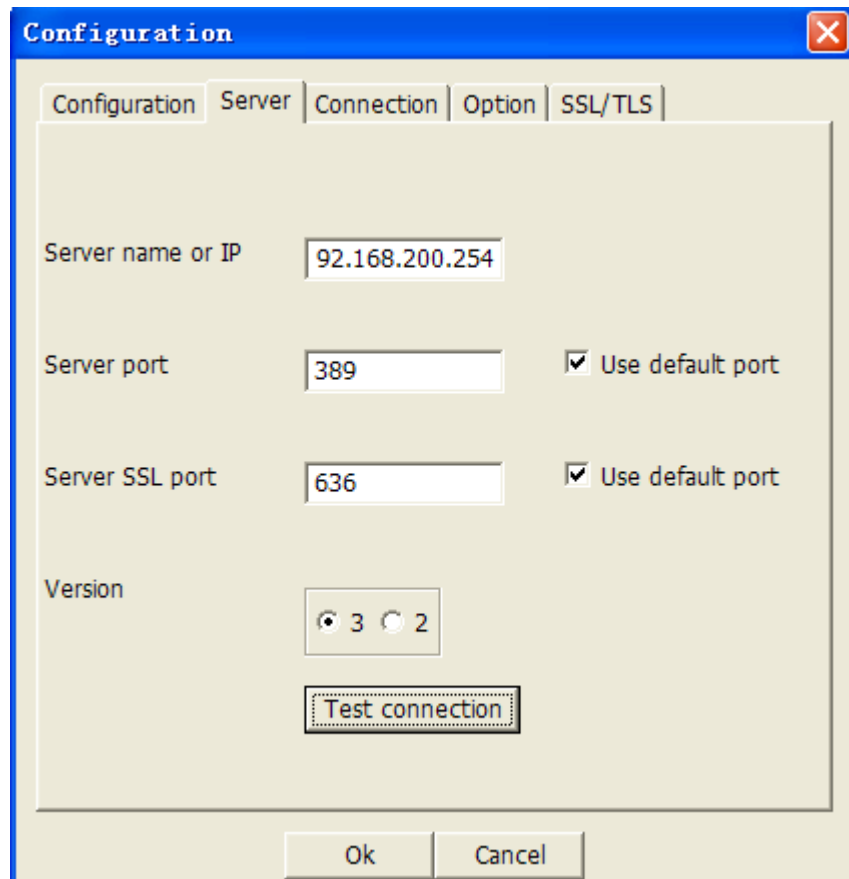
c. Press Test connection,the password is blank(no password),press ok,will display Test OK.

NOTE:

Server name or IP\Server port\Version settings are relate with the settings on escene phone.

d. Configure the "cn=Manager,dc=escene,dc=cn" on User DN,and tick the Store password for protect your settings,enter the password which you configure on the server.
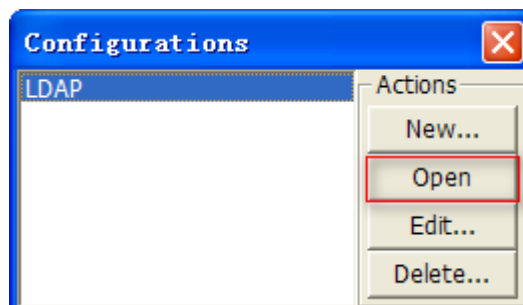
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The Base DN will auto-configure if you press the [Guess value].
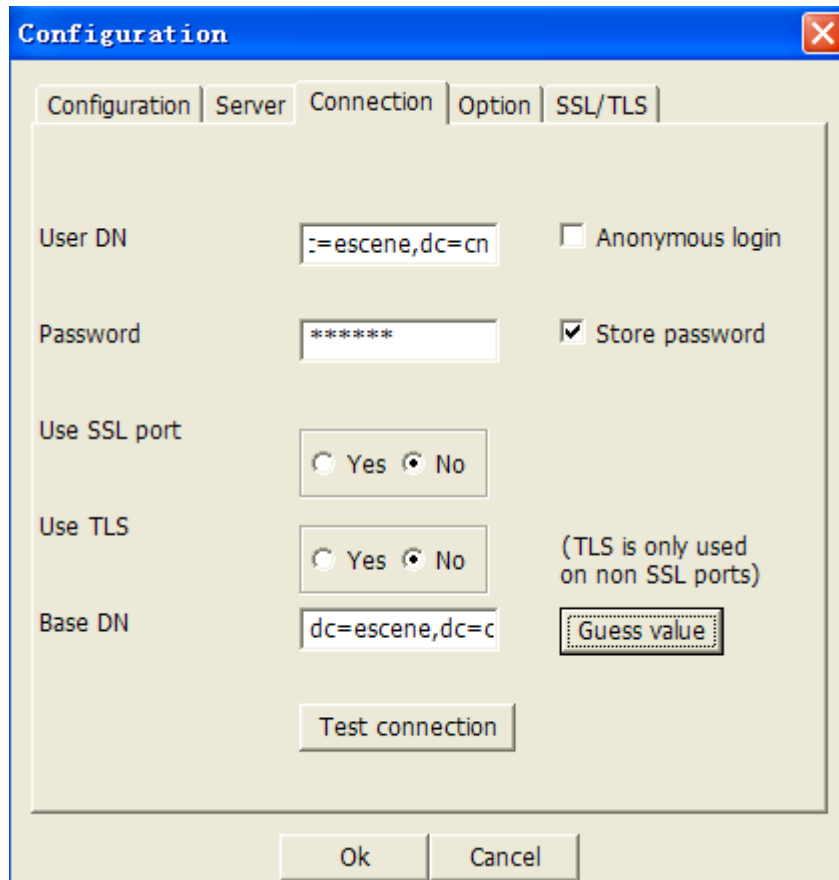
After the settings above,you can press [Test connection] to test your settings,if it prompt warning message,please re-try the steps above again,we can continue the next steps if the test is passed.
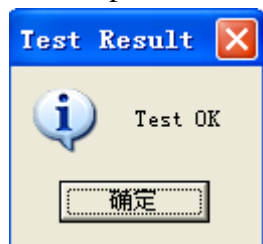
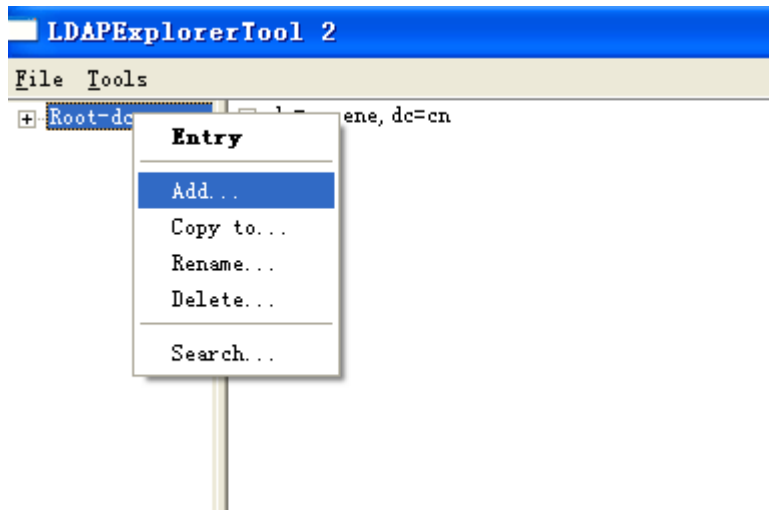8. Choose the Action[LDAP],then press [Open] achieve the settings.

Then you can get the page like following picture. Please right click the

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action to add the contacts.

6.3 Add the Entry

1.Please right click the action to add the contacts.

2.Create new entry.

   Parent DN: This setting will automatic generation according the Configuration setting.

   Entry RDN: The format is cn=XXX

   Object Class(from schema): Select the structure class which entry belongs to, each structure class has its own must attributes and may attributes. We select [Person] for example here.

   Must attributes: Double click attribute to add them to the entry node. If need multi-cn, can be allow to repeat added.

   May attributes: Double click attribute to add them to the entry node. If need multi-Telephone number, can be allow to repeat added.

Please notice the note label on the picture above.
After save the settings, you can find the new added entry at the left of the LDAP catalogue.
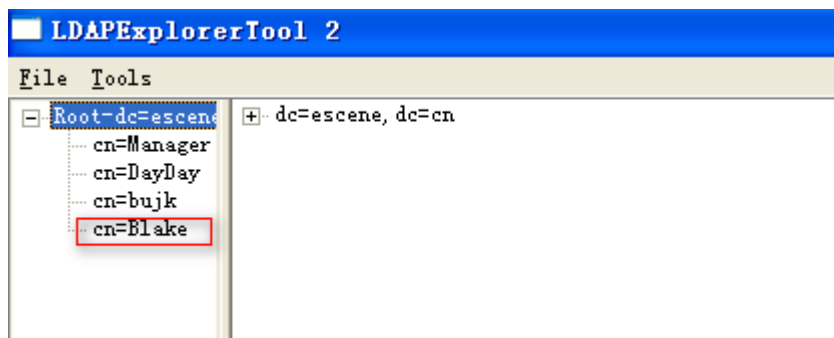
3.You can add more contact entries by these steps.

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